

THE SOUTHERN PLANTER,

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts.—*Xenophon.*

Tillage and Pasturage are the two breasts of the State.—*Sully.*

FRANK: G. RUFFIN, EDITOR.

P. D. BERNARD, PROPRIETOR.

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For the Southern Planter.

BARLEY AS A SUBSTITUTE FOR OATS AND WHEAT—JOINT WORM.

Mr. Editor,—I often regret my inability to contribute more freely to the noble cause of agriculture, through your valuable periodical, in which I am daily feeling more and more interest. But if I cannot communicate, I can ask for information, and throw out suggestions. I have long thought that, although Indian corn is so important an article of cultivation, too much of so exhausting a crop is aimed at in this country. In casting about for a substitute I have been led to think that barley might, probably, answer this purpose better than any other grain. It is said to thrive well in light, dry and friable soils, if rich, and to yield, per acre, more than any other small grain. I have read in the *Memoirs of the Agricultural Society of Pennsylvania*, that two brothers—I think by the name of Cooper—gained a premium for raising one hundred and seventeen bushels of barley per acre for two successive years. Now, most of us would think we were doing pretty well could we make one-third of that quantity per acre of any grain, good for feeding animals. That it is good for this purpose may be inferred from the fact, that the excellent horses of Arabia are said to be supplied with no other grain besides barley. Another reason why, in this immediate section, some new grain should be sought for, arises from the fact, that for some three or four years we have not been able to make the oat crop, except on the richest land, pay charges for cultivation. For the last two or three years I have been trying the Polish, or Multicole rye. I should be greatly pleased with this, did it not seem to be utterly impracticable to prevent its intermingling with and befouling the wheat crops. Whether barley could stand the long cold droughts, to which our spring time is so liable, any better than oats, is yet to be tried. I think it would, as I made two small crops of it seventeen and eighteen years ago, when the springs were cold and dry, yielding much better than I expected, on quite poor land. I was induced to abandon its culture from inability to clean off the beards, or airns, as, I believe, they are called in Scotland. Moreover, the joint worm is making its appalling appearance among us, and although they have not come

in sufficient abundance to damage our last crop of wheat materially, yet there were enough to make us inquire anxiously what we should do when their myriads shall have completely marshaled themselves upon us. We will then sadly need a substitute for the *wheat crop*.*

I have stated these opinions and facts, with a view of begging you to inform me, if you can, and if you cannot, to aid me in inquiring whether there be not, and if there be, where attainable, a machine, of moderate cost, called, in Scotland, I believe, a "hummelling machine," made to remove the formidable beards, or airns, from barley. I wish, also, to learn, whether there be a market in Richmond for barley. The water of the James and that of the Thames are said to be exactly alike, as regards the admixture of limestone and freestone. It seems strange, then, that no one has attempted to make something equal to London porter in Richmond. If there ever was a brewery there I have not heard of it. A good market for barley might afford great relief to that portion of our State afflicted with the joint worm. I know nothing of the present price of barley in Baltimore, but a few years ago it brought there one dollar per bushel. Could we get that price for it in Richmond we might afford greatly to curtail our crops of wheat until the calamity of joint worm be overpast.

* The barley crop unfortunately is, or was, as much infested by the joint worm as wheat, and cannot, therefore, substitute it. The first accounts we have of the insect were from Boston and its vicinity, where it appeared in 1828-9, and made such destructive attacks on barley that its cultivation was discontinued. In fact, its scientific name, *Eurytoma Hordei*, as our correspondent will see arose from its attacks on that crop—a name given to it by the learned Dr. Harris of Cambridge University. Were it not for this, we should advocate the cultivation of barley as a substitute for oats, thinking it, though our opinion is based on theoretical principles, not only a better food for horses than oats but also better adapted to our climate than that cereal, though it requires richer land. But after all, the true substitute for the wheat crop, to a great extent and one which should be resorted to, whether the joint worm increases or not, is fine wool. We venture to predict that the fine country in which our friend resides will never be redeemed except by sheep, more particularly fine wool sheep, that is to say, Saxon or some other variety of the Merino.—
ED. SO. PLANTER.

I cannot tell what effect the introduction of porter as a common beverage might have on the temperance cause. Far be it from me to wish evil to that cause when I say that I think it would be much better than the common use of vile and poisonous whiskey. But I believe that all history will testify that sudden or violent changes in national habits and institutions have been either impracticable or injurious. Even the benign influences of Christianity have been very gradually diffused over part of the earth. In morals, I would certainly say, "of two evils choose neither;" but if one of them be inevitable, I would prefer the least. On this principle I have long doubted whether the culture of the grape in Virginia, with the view of obtaining cheap native wine, might not go far towards abolishing the shameful use of whiskey.

As my unfortunate introduction to the joint worms has been so recent it might become me to say nothing of the destructive little imps, whose name, it seems, is legion. But as I have mentioned them, I will make a suggestion. In time of harvest I cut off some of the joints of wheat straw containing them in the chrysalis state, and put them in a bottle, tying a bit of cloth over its mouth, that I might see to what they would turn. Being in Albemarle not long since I happened to mention to some friends, better acquainted with them than myself, that they remained *in statu quo*, and that I could find them, unchanged, in great numbers in my stubble fields. They readily informed me that I might find them in the same condition until after Christmas. If, then, nature has given them their law, that they should be preserved, from year to year, above ground, in the stubble, to propagate their species, it is hardly probable that they could be preserved alive under ground, were it well ploughed as soon as practicable after harvest. It is true, that many of them are reaped off at harvest and carried to the threshing machine. Such as escape destruction in passing through this machine—and it seems that multitudes do—are exposed to be eaten by cattle, trampled under foot amongst the manure, or pressed down in stacks from which it is presumable that not many could escape in the fly state, should they hatch in the heart of the stacks. Should such escape, however, be feared, the straw might be spread and turned under ground with the stubble, or in some other place. In that case, ample provision should be made for feeding cattle, by saving clover and other kinds of hay enough, and the wheat straw would be fine manure, whilst we might be killing the joint worms, by burying them alive. It is true, that such management would destroy the young clover among the stubble. This might be obviated by sowing clover seed elsewhere than among wheat. Or the seed might be reserved and sown by itself, after fallowing the stubble. The crop of clover, in that case, would be much more abundant and uniform, as I know

from experience, and come to maturity just as soon as if it had been sown on the wheat.

I perhaps ought to state before closing, that I sowed a dozen bushels of Troy, or Coad wheat, last fall. This is a very large variety of wheat, having coarse bristly beards, and straws big enough for pipe stems. After diligent search I found joint worm in but one straw of this wheat, and even that had a head of good wheat on it. Such experience is not sufficient to demand undoubting confidence of me, yet it is worth remembering, and will induce me to sow more largely of this variety on the approaching seed time.

Theories, surmises and suggestions are, for such a journal as yours, far less valuable than practical details; but on a subject of such incalculable importance, I thought that the manifestation of even a wish to do good might find favor in your sight.

Most respectfully, &c.

W. S. MORTON.

Cumberland, Sept. 17, 1853.

P. S.—I ought to have stated that according to the best investigations I could make the joint worms travelled about twenty miles* further south during the last year. I judge, however, from rumors which have reached me, that their migrations are divergent in every direction. I ought, also, to have said that according to the plan proposed—or perhaps any other, it might require concert of action among the wheat growers of the community to exterminate the joint worm; yet I would suppose that any individual, by vigilant watchfulness and effort, might profitably diminish their ravages on his own premises.

W. S. M.

For the Southern Planter.

THE PEACH.

Mr. Editor,—I have been applied to by many persons for information relative to my mode of cultivating the peach, and I conceive the most convenient and acceptable medium of communication with such persons will be through the Southern Planter, and hope you will be so kind as to allow me to use it. I have been paying close *personal* attention to the improvement of fruit generally for the last ten years, and with the peach have succeeded beyond my most sanguine expectations. The first thing to be done to have good peaches is to select a site for the orchard near the curtilage, and *enclose* it. This is very important, for many persons plant trees in large fields, and promise themselves that "at some more convenient season" they will enclose it. This season never arrives, but summer comes, with all its multiplied demands upon their labor,

* About the rate of migration on the north side of James river.—ED. SO. PLANTER.

and the orchard fence is neglected for the more urgent demands of *the crop*. By and by the grass in this field is wanted for the cattle—they cannot do without it; it is worth more than the young trees; there is no time now for fencing, and in the cattle are turned. The consequence is, in a few days every tree is seriously injured or entirely destroyed. I speak feelingly on this subject, Mr. Editor, for I speak from sad experience.

Any soil is better suited to the peach tree than a stiff, tenacious one. The ground should be perfectly broken with a three-horse plough, followed by a large subsoil coultter. Then, in November or December, give it a dressing of thirty wagon loads per acre of well rotted stable or farm-pen manure, and incorporate it with the soil by harrowing or with a one-horse plough. No manure that is liable to go through a fermentation should be applied to trees, particularly the peach, except in winter. February is the best month for transplanting peach trees, though any time from the first of November until the fruit buds begin to show a little of their pink bloom in spring, will answer. Before the trees are taken from the nursery dig holes twenty feet apart, two feet in depth and width. The depth of surface-soil should be laid on one side and the subsoil scattered, and its place filled with virgin earth. If the trees are brought from a distance, unpack the bundles and place their roots in a trench and cover them with fine earth and water them copiously. If it is inconvenient to plant immediately, they may remain in this situation for several days without injury. Before you plant, prune each tree *freely* (for nurserymen rarely prune enough) and examine about the collar and crown of the roots for the borers, or peach worms, and destroy them. Plant the tree one or two inches deeper than it stood in the nursery; spread the roots out, and while the surface-soil is being shovelled in pack closely with the foot, taking care not to throw in any large lumps of manure, and finish by leaving the earth about the root in the form of a basin, to receive the rain or watering, if the ensuing season should be dry. Drive a stake by each tree and tie the tree to it with a soft string, first wrapping the stake with an old rag where it comes in contact with the tree. The orchard should be cultivated for five or six years in some hoe-crop. Never let any other than a one-horse plough go into it, and not that if you have time to spade it, for after you have taken every precaution—wrapped the traces, cautioned the driver, &c. some of the trees will be injured. A crop of Irish potatoes, planted early and covered deep with straw or leaves, is, perhaps, the best crop for a young orchard, as it will allow cuffee and his plough as few visits as any other crop, and at the same time keep the land open and moist. The next spring after planting remove a little of the earth from around the crown of the roots, and examine for the borer. His presence will be indicated by the exuded gum that is deposited about the

wound that he has made in the bark; cut in after him with a knife and remove him. After examining every tree in this manner, make a small mound around each about six or eight inches high, of air slaked lime and leached ashes, or ashes alone, if lime is not convenient, or even earth, if you have nothing better. This should be done before June, and remain until October, as the wasp which produces the borer deposits its eggs in the time between those months. The lime and ashes will lie so close to the tree that when the young grub or borer is hatched he cannot get down to the soft bark, or else he is killed by the lime or ashes. After from this mound should be scraped from, and scattered under the tree, and the collar of the tree left exposed during winter, so that if there are any young worms that have not effected an entrance into the tree they will be destroyed by the cold weather. Then in spring make another mound about each tree. This practice should continue regularly from year to year. Lime and ashes are the best fertilizers that can be applied to young trees in summer, provided the one has been slaked and the other dripped or leached.

The February after the trees have produced their first crop of fruit their limbs should all be "shortened in," by cutting off about one-half of the previous summer's growth. This will remove near one-half of all the bearing wood, as wood that is *more than one year old* never bears fruit, and consequently will diminish the *number* of peaches, but will give the same amount by *measure*, but of a much more superior quality. By this mode of pruning you improve the health of the tree, the limbs are shorter and stronger, and as the weight of fruit is nearer the body of the tree they are not so liable to be broken off. The trunk of the tree, that is, from the root to the limbs, should be about three feet. For more minute direction of this subject I would refer to "Downing's Fruit and Fruit Trees of America," one of the best books, if not the very best of its kind, it has ever been my good fortune to meet with.

The disease known as yellows is one cause of discouragement to those who plant peach trees. But I am convinced it is not so great a scourge as persons are apt to think it. By some the disease is considered contagious, but from my own experience, I am inclined to think it is only constitutional—produced originally by over-bearing and general neglect of tillage and pruning. It may be spread by planting seed from a diseased tree, or by budding or grafting from a diseased tree. This disease is known by the premature ripening of the fruit, the yellowish appearance of the foliage, and the general unhealthy appearance of the tree. It is sometimes the case that only a part of the tree is diseased at first. I have restored trees, that were entirely diseased, to luxuriance and fruitfulness by plucking off all the fruit and scattering slaked lime and leached ashes very liberally around them as far out as the limbs extended, and by using the pruning

knife very freely the next winter, and never allowing them afterwards to bear an over-abundant crop.

I hope my brother farmers will not think this too much labor to bestow upon this most delicious of all fruits, when I tell them that one acre of peach trees, thus treated, will afford peaches enough for a family of forty—white and black—and will only require, *annually*, the labor of one hand for *two weeks*. There are many things necessary to be done, but there is but little time required for each; this time may all be saved if the farmer will put his own hands to the work, and debar himself, occasionally, the pleasure of attending *court*, or go less frequently to the store, post office or blacksmith's shop, to waste his time in retailing scandal or "talking politics."

I add a list of the best peaches that I cultivate, naming them in the order they stand in my estimation. First comes the Old Mixon, then the Large Malta, the Royal Kensington, Early Red Rareripe, Cary's Large Red, White and Red Heath, Lemon, and Early Yellow Pineapple. I have always gotten the very best trees from Messrs. Joseph Sinton & Sons, Richmond, Va. They have a large nursery and an extensive variety of fruit trees, and I feel safe in recommending them to my brother farmers as perfectly reliable. Persons wishing trees would do well to refer the nurseryman to their commission merchants, where they are not personally acquainted.

Very respectfully,

P. H. GOODLOE.

Bloomfield, Oct. 1, 1853.

For the Southern Planter.

IMPORTANT IF TRUE.

Mr. Editor,—The tobacco fly, or flea, which is so destructive to young tobacco plants in early spring, often produces a failure in plants in many localities, and a consequent short crop, as must be the case this year. George P. Richardson, Esq. a practical and very successful planter and farmer of this county, assures me that the little depredator can be fenced out with absolute certainty, and at very little expense. I do not know whether the plan of defence is original with him or not, but he assures me, from experience, that no plant-patch that is fenced in soon after being burned in winter, by planks from twelve to fourteen inches wide, set up longitudinally, and with the ends well adjusted to each other, so as to enclose the patch with a close plank fence twelve or fourteen inches high, will ever suffer from the depredations of the fly, or flea. I feel confident that this mode of defence will prove effectual, not only from what I know of friend Richardson as a practical planter, but from what I have observed of the manners

and customs of the insect. He seems to travel by *jumping*, and *not* by *flying* or *crawling*, and I hardly think he can jump over a plank fourteen inches high.

A SMALL PLANTER.

Halifax, Sept. 15, 1853.

For the Southern Planter.

WHEAT REAPERS AND DRILLS

Mr. Editor,—Mr. Edwin G. Booth in his communication to the Planter has invited any farmer to give any report he may choose on the subject of reaping machines or farm implements in general. Now as I have been in the habitual use of them for several years I will make report of the only two descriptions of reapers I have seen used, viz. M'Cormick's and Hussey's. My reasons for doing so are, that on Chricoke farm M'Cormick's reaper was first used—and Mr. Booth advocates a machine of Hussey's which has cut its fifth harvest at Chricoke—there is a M'Cormick's reaper which has gone through five consecutive harvests, and is still a good machine. On an adjoining farm—Oak Spring—one of Hussey's was used this last harvest—a very fine implement it is too—which, new from the shop with a good team of four mules, changed every few hours, and some seventeen hands, cut from twelve to thirteen acres a day through the harvest. M'Cormick's, with a similar team and twenty-seven hands, cut from twenty to twenty-one acres a day. The wheat on both fields averaged about seventeen bushels per acre. Both machines cut day by day without any accident. Both cut as clean as possible. It was highly exciting to ride from one field to the other and see them. The servants who worked Hussey's had for several harvests previous worked M'Cormick's, and preferred it to the former, on account of its cutting a foot more in breadth, being easier to rake the wheat from, and being a much easier draught, requiring, too, a slower gait for the horses. Hussey's, though, is better, from having four wheels for the necks of the tongue horses, as there is no perpendicular pressure; but as the weight is farther off, the draught is consequently greater. M'Cormick's could be easily worked by four wheels, as Mr. Booth proposed for Hussey's. My preferences are for M'Cormick's, because we were the first to use and recommend his machine; also, because it is a more complete implement. It catches and holds the straw while it cuts it. On the other hand, Hussey's machine requires the straw to be caught and held by the man who rakes, which is a severe operation of a hot day, when the wind blows the way the machine is running—a thing that occurred the last harvest. There was wind almost every day, and work the machine as you would, half the time the wind was from the machine. Mr. Booth also

recommended Hussey's reaper because it cut clover well. That it may do, but that was not the object of its invention. To cut wheat was its original design, and to that we ought to look. When called on to decide the merits of a grain reaper, we do not consider its capabilities as a hay mower any more than if called on to look at a set of grain cradles we would say you can't mow clover with these. The capability of Hussey's machine to mow clover or any other hay comes under another head. McCormick invented his reaper to cut wheat, and it succeeds. He has a machine for mowing hay. The reaper is the one in question. Mr. McCormick has done his machine great injustice by the infamous way in which he allows them to be built. I have had three at a time in a field, and neither would work, yet the plan of the machine was not at fault—it was the workmanship. In this neighborhood there are several farmers who use McCormick's reaper who, like myself, have had good and bad ones, and will make the same report that I do. Mr. Allen, the owner of Curle's Neck, either published, or caused to be published, a recommendation of McCormick's reaper after the trial on his farm, and he emphatically gave the credit to him. Another reason why I prefer McCormick's reaper, if it is only comparatively as good as the rest, is, he is a Virginian, and I have heard the other inventors were not. I believe something good can come out of Nazareth, and choose to prefer it. All that I have said, though, is merely in favor of my choice, not to deteriorate the other implements at all, for if I had not one of McCormick's, or if I could not obtain one that would work well, I would certainly get one of Hussey's. To a farmer unacquainted with machinery, Hussey's is probably the best suited. Not having a reel makes it rather more simple, and shoving straight out behind, appears easier until fully tried. Mr. Booth said raking straight out behind made the hands work more briskly than where it came off at the side. I do not think so. It requires more binders, and, consequently, leaves fewer toaters and shockers; causes the overseer to fret more, and is altogether more provoking. Should a single binder leave his place to step aside, his place must be instantly supplied or the horses trample the cut down wheat. Should any cause make it necessary to push the shocking, the reaper must stop, unless you have a full force; also, the entire time of the manager is required to the reaper and the binders. With the other machine you may cut at will, bind at will and shock as you choose. The farmer, however, is benefited by them all, and I hope all may be enough encouraged to stimulate them to still greater improvement, as well as to lower the price of them all, which at present is one-third more than is necessary.

The drilling machine is also a useful implement, and suits the tide water sections of our State very well. The lands are alluvial, and easily cultivated, presenting no material ob-

struction to cultivation after they are once freed from stumps and roots. Amongst the advantages of the drill is the uniform depth it deposits the grain, which may be regulated to suit the soil as well as the judgment of the farmer. Two inches we consider a good depth, and usually set the drill to it. The little trenches made by the hoes of the drill are a decided benefit to the wheat; they break the keenness of the wind from about the roots of the wheat; besides, when the ground heaves, from the action of frost, the dirt crumbles from the sides of those little trenches and covers the roots. The trenches are all the time, from their nature, pressing together, which prevents the earth from being so loose about the roots of the wheat, making them less susceptible of cold. This is apparent from the uniform color of the wheat through the winter. No harrow can cover wheat a uniform depth, particularly as much as two inches. There must be some places where the wheat is barely covered; other places where the grain is carried to the bottom of the teeth. On Pamunkey land a small amount of preparation is necessary for the drill. If the land is well broken, the sward well buried, and the land ploughed some three or four weeks before it is seeded, no harrowing is absolutely necessary; once makes the soil more friable and uniform, and is best; more than that is unnecessary. Even when land is fallowed early, when a considerable cover of crab-grass, fox-tail and wire-grass, has grown on it, heavy harrows, with new teeth, being run over it enough to scarify the soil, the drill will do good work, and the wheat be as good as elsewhere; though until late in the winter it will make no show. On corn land, where there is a cover of peas turned in, or much crab-grass ploughed under, the drill is awkward, and had best be let alone. But should there be neither peas nor crab-grass, if after cutting down the corn, a single plough be run down each stubble row, so as to throw out the stubble, as well as level the ridge, the drill will work finely, and the wheat be probably a little better than where the land is first ploughed and the wheat harrowed in. Again; whilst the corn land is being gotten ready and seeded, which will take the best part of the team and force, a pair of mules or horses, with two men, will put in the fallow, whilst if Ruffin red wheat is put on the fallow, and white on the corn field, they will come into harvest quite suitably, the white wheat being always the latest.

These remarks are confined entirely to my knowledge of farming in this immediate vicinity. The remarks of Mr. Booth are applicable and just, as regards the close soils in the upper country—nor do I wish to controvert one of them. As far as my knowledge of wheat machines goes, the machines made by Mr. Haw of Hanover, are the best, safest and most durable. This machine is a cylinder, or gum log, hollowed out, with wedge-shaped teeth put through from the inside and

secured with iron rods through them. The outer surface is covered with sheet iron, so punctured that the teeth are nicely fitted. This is the safest threshing drum I have seen. The stave, or beater drums, are less permanent and not so safe, from the centrifugal tendency of the staves, though I have seen them do fine work. Those cylinder drums which have their teeth either screwed or driven in, are still more liable to come out than where they are put in from the inner side and secured, as mentioned above. The different styles of horse powers are as numerous as the different styles of pleasure equipages, but to moderate farmers some easy portable horse power is most suitable. One which can be moved to each field, the wheat threshed and the grain hauled to the barn, whilst the straw is left on the land, either to be fed or spread as manure.

All that I have written has been merely as an expression of my views, not to attack or hold up any thing in Mr. Booth's piece. His called out this, and I hope will call out many better. I farther hope that the prejudice against agricultural machinery will annually decrease, and that the increased demand for it will greatly tend to perfect and cheapen all implements in the catalogue.

WM. A. BRAXTON.

Hybla, King William, Sept. 12, 1853.

For the Southern Planter.

THE FENCE LAW—AND THE BEARING OF THE MAINE LIQUOR LAW UPON PRODUCTION.

Mr. Editor,—I have read the report of the Fence Law Committee appointed by the Agricultural Society of Brunswick County, which was read before that Society on the 16th of March last, and published in the June number of the Planter, and I am highly pleased with that report; it speaks the interest of old Eastern Virginia, if not its present sentiments. I have been a subscriber to the Planter from its origin and have never written any article to encumber its columns, not because I dislike to write, but being a small farmer, and knowing that there are so many farmers that understand their business, and who make fine crops, and who are deeply interested in all things that concern the farmer, and who know how to write, and are the very men to write to inform their less informed brethren, but they do not write. This, then, is the apology that I offer for thus intruding. I can add very little, if any thing, to the able report above referred to. Notice was given publicly several months previous to our last popular election, by advertisement set up at the Court House door of Sussex county, that a vote would be taken at the Court House and the several places of voting in the county, on the subject of the

present fence law. This was done to afford sufficient time to discuss the subject fully before the people before the day of election, but nothing was said upon the subject only in private circles. All office seekers, from a constable up, were afraid to say yes or no upon this question, as they were tauntingly told, if you vote for this measure I will mark you when scratch day comes round. Some mounted the hobby that it would oppress the poor. This was sounded like the cry of mad dog, and it spread like wild fire. So there was a decided majority against the repeal of the present fence law. And why? Because the people did not understand the question fully, as no one had the independence to come out and advocate this measure, though in favor of it—he was afraid that it would operate against his election. And, sir, it is idle, under our present purely democratic government, to talk about our boasted independence and our privilege to exercise the right of suffrage. Poor privilege it is, when a voter is told at the polls you vote for this measure or for that measure and I will put my mark upon you.

The Legislature of Virginia has passed divers acts declaring certain rivers and creeks lawful fences; some of which in certain seasons of the year would not swim a pig or float a catfish. Why not then say that every man's land-marks shall be a lawful fence? Why not legislate for the greatest number and for the greatest good, instead of this partial legislation? If the Legislature has the right to say that a man shall make a lawful fence around his corn field, why not say that he shall make a lawful fence around his stock and keep them in? This would put to rest the many complaints that we now hear of stock being killed upon rail roads; and besides, many of these animals are known to be vicious, and might attack little children going to and returning from school, &c.

It is not that we are opposed to our neighbors' stock grazing or ranging upon our lands, for, as "Southampton" very justly remarks, "there is no range worth calling a range." We are actuated by quite a different motive, and that is to relieve ourselves of this enormous fence tax; for whilst the State tax is oppressive enough, in all conscience, and with some almost past forbearance, it is nothing to compare with the fence tax in old Eastern Virginia.

Whilst I am writing, I will call your attention to one other subject which, it seems to me, should be met at its threshold, as it is intimately connected with the agricultural interest of the State of Virginia—and that is this crusade which is being gotten up by certain fanatics, calling themselves Sons of Temperance, or in other words, the Maine liquor law advocates, or the destructive law advocates.

In the late State Temperance Convention, which assembled in Charlottesville, the following resolutions were adopted:

"1st. *Resolved*, That there ought to be a law

prohibiting the *manufacture*, or keeping for sale, or the barter, directly or indirectly, of intoxicating liquors, except for sacramental, medicinal and mechanical purposes, and that such a law should be guarded by proper provisions and penalties, and *especially* by the provision that all such liquors in one's possession contrary to law shall be destroyed.

"2d. *Resolved*, That such law ought to be submitted to the people of each county and city, and be in force when it is adopted by a majority of the legal voters."

Now, Mr Editor, suppose the Legislature of Virginia pass a law abolishing slavery in the State of Virginia and submit that law to the qualified voters of the State, and there is found a majority in favor of that law, does any man suppose, or is he soft enough to think that such a law would bind the minority? The law itself would be a nullity, because it would be in direct conflict with the Constitution of the United States, and I had thought that constitutions were made to protect minorities against extravagant and unconstitutional legislation. The Legislature of Virginia cannot pass such a law as is recommended by this wise council that assembled at Charlottesville, unless the members thereof perjure themselves, as they have to take an oath before they enter upon the discharge of their duties, to support the Constitution of the United States. The Constitution of the United States says, that "no person shall be deprived of life, liberty or property without due process of law." How then is this law of destruction to be carried out; how is this due process to destroy a man's property to issue when there is nothing due the law, (I mean constitutionally,) and how, I would like to know, can *due process* of law issue upon an unconstitutional law, or who would regard such a law? This law of destruction is then the higher law authority; the law by which the abolitionists of the North hold on to our fugitive slaves; but the abolitionists of the North do not undertake, under this higher law authority, to destroy our slaves; they only hold on to them until forced to give them up by due process of law, but after our property is destroyed there is an end of it. And, Mr. Editor, it is useless for us, of the South, to go to the North to look after northern abolitionists when we have so many in our very midst. The northern abolitionists contend that no one has the right to raise, buy, or sell a slave, unless it be for the purpose of emancipation. On the other side, the Sons of Temperance and the Maine liquor law and the destructive law advocates contend that no one shall be permitted to make, buy, sell or use spirituous or malt liquor, wine or cider, unless it be for medicinal or mechanical purposes.

Now to prove that this subject is intimately connected with the agricultural interest, and the revenue interest, and the financial interest of our State, I will take, firstly, five counties in Eastern Virginia, to wit: Southampton, Isle

of Wight, Nansemond, Surry and Sussex, and the revenue derivable annually from the sale of brandy amounts to as much as that derived from the sale of tobacco in the five counties, to wit: Mecklenburg, Halifax, Pittsylvania, Patrick and Henry, from the sale of tobacco. In the single county of Southampton, of a favorable year, (for we have had tobacco years as well as fruit years,) the revenue from brandy would amount to upwards of one hundred thousand dollars, more than sufficient to build the contemplated plank road from Petersburg to Jerusalem; and the county of Isle of Wight would fall but little below Southampton. Then taking the first mentioned five counties and the revenue realized by the citizens thereof, would amount annually to between three and four hundred thousand dollars. And, now, when all the resources of the State, even the license tax, and all the energies of the people are required to save the Old Dominion from bankruptcy or repudiation, we are to be deprived (if these fanatics can have their way) of the very means of paying our taxes and other liabilities.

The Legislature of Virginia has as much right to pass an act to destroy our corn, wheat, tobacco, cotton, &c. as it has to pass an act to destroy one species of our property, to wit: brandy, and it must have been an oversight in this council of wise legislators that lately assembled in Charlottesville, that they did not include every article of commerce and consumption in their recommended law of destruction.

This subject is to be the hobby that is to be mounted upon in every election by the people. It is to ride some men into office who are of "us," and to ride some out of office who are not of "us."

JESSE HARGRAVE.

Sussex, Sept. 17, 1853.

For the Southern Planter.

HORSE vs. MULE.

Mr. Editor,—I have seen a good many communications in your paper showing the advantages of mules over horses. I wish to give you a few fire-side calculations of an old farmer on the subject. Suppose a farmer to start with a team of ten mules, which will cost, say \$1200; the losses would amount to at least one in two years, which, at the same price, would be sixty dollars a year to keep up his team. Suppose another to start with four horses and six mares, costing \$1000; he ought to raise not less than two colts a year—the cost of raising which is, say \$40. As I have allowed that five mules would die in ten years, I will allow that eight horses would die in the same time, which would leave the farmer twenty-two horses at the end of the ten years. He ought to have sold during the ten years

twelve of these at \$1200; now deduct the cost of raising, \$480, which would make his team cost him \$280 during the ten years. Whereas the fifteen mules would have cost him \$1800.

If he were to attempt to raise the mules, he would have to buy mares, which, added to the cost and trouble of raising them, would make it cheaper in the end to buy the mules. But where are the mares to come from if we all raise mules? They say that mules live longer, stand abuse, and eat less than horses. I have disposed of the long life in allowing eight horses to die in the same time that five mules would. I can allow nothing for abuse to either; and as for their eating less, I have not found it the case; because I can turn my horses out on grass every night for six months in the year, besides all times when they are not used, and have always found the old saying true about mules, "that there was but two places for a mule, the stable and the harness;" for as soon as he is turned out he will get into mischief, consequently he will eat more grain in a year than a horse.

Virginia is now paying to Kentucky \$200,000 or \$300,000 per annum for mules; and must pay more, because the Kentuckians have already bought up a large number of mares in Western Virginia at double the price they formerly sold for, and have almost stopped the raising of horses there; and we are obliged from necessity to buy their mules. That, I believe, is the principal cause of the high price of horses at present; and I think you will find that they will steadily rise to nearly double their present value. Now, sir, this must be a losing game. Virginia, once famed for her fine horses, has now become tributary to Kentucky for animals to supply their places, which cannot keep up their own race, and must be an increasing tax on her farmers, who could raise their own horses and some to spare.

ANTI-MULE.

BROOM CORN.

In the Mohawk Valley, New York, vast quantities of this crop are annually grown. Pennsylvania, Ohio and Connecticut are the next largest producers of it. Its origin, as a cultivated plant in this country, is attributed to Dr. Franklin. It is a native of India. Franklin saw an imported whisk of corn in the possession of a lady in Philadelphia, and while examining it, as a curiosity, found a seed which he planted, and from this small beginning arose this valuable product of industry in the United States. In the same manner, England and America are indebted for the weeping willow, to the poet Pope, who finding a green stick in a basket of figs sent to him, as a present, from Turkey, stuck it in his garden at Twickenham, and thence propagated this beautiful tree.

Broom corn is of a different genus from In-

dian corn. They will not mix. In the Mohawk flats the best cultivators of it sow with a drill as early in spring as the ground will admit, in rows, three and a half feet apart. As soon as it is above ground it is hoed, soon after thinned to three inches apart. It is only hoed in the row to remove the weeds near the plants; the harrow and cultivator are then run through to keep down the weeds, and a small double mouldboard plough is run shallow between the rows. It is not left to ripen, but cut green. It is not lopped till ready to cut. One set of hands goes forward and lops or bends the tops on one side; another follows and cuts them off when bent; a third gathers them in carts or wagons. At the factory they are sorted over and put into bunches, each bunch of brush of equal length. The seed is then taken off by a sort of hatchel, worked by six horses. It is then spread thin to dry on racks in a building for the purpose. In about a week it can be packed away closely. The brooms are made in winter, about 75,000 dozen to each 100 acres of land. The stalks are left on the ground to be ploughed in next spring. For the handles a peculiar lathe, turned by horse power, is used, which manufactures them with great rapidity.—*Farmer's Companion and Horticultural Gazette.*

From the Mark Lane Express.

ACTION OF DROUGHT ON PLANTS.

The specific action of drought on plants is one of the problems not yet entirely solved. Whether it is the indirect waste of moisture on the plants by evaporation, or the want of the due proportion of water necessary to build up the structure of plants, or whether it is some indirect action on the constitutions of the soil, is by no means a settled question.

The present season has afforded abundant illustrations of the effect of want of moisture on the several plants the farmer has to cultivate; and what is more remarkable, the drought, though absolutely less than it was last year, seems to have had a far greater effect on the plants. The meadows, especially, appear to have suffered. In all the northern counties, particularly, the grass crop is peculiarly affected. The finer and shorter grasses are absolutely either wanting, or so thin that they show the meadow to be without bottom grass. The coarser grasses are tall, but thin, and running to seed, forming no tillering stalks, and few blades in comparison to those of former years. The corn is the same—thin, stunted, and spiry in its character. There has been no tillering—no

thick matted surface. The drills have been visible up to the present period, and the stems are fast running to ear before half the usual height is attained, being also hard and yellow in color, and as different as possible from the graceful flopping blade the wheat plant usually exhibits at this period.

Now, in what specific way has this drought so acted on the plants? In ordinary vegetables, ninety per cent. of their whole structure is simply water. Hence it is easy to conceive how large a quantity of that material is necessary during their growth and development. But there was no such absolute deficiency this season. The soil always contained a comparatively large amount of moisture; the dews were often plentiful, amounting to fully as much more as any diurnal development of the plant could require, and all the tables of rain fallen in the spring of this year, we have seen, showed a larger quantity than in the corresponding months of last year. Hence, it seems, we must look to the abstract cause of the injury—to somewhat beyond the mere denuding of the plant of water, as such.

We think the theory of Liebig far better established this season. The plant, to take up its elements, must have them presented to it in a state of solution. The action of rain operates to dissolve regularly and gradually the material required by the plant, both in the soil and in the rocks from which the soil is continually forming, by disintegrating the small particles existing in the land. These are being supplied to the plant by the rains as it requires them, but this year they have not been so washed out and made ready for its use. But why did not the same cause operate equally in the spring of 1852? Simply because the incessant rains of the autumn and early winter had washed out the soluble constituents of the soil, so as to leave less free material in the land by far than in the previous spring, and hence the ordinary drought had much greater effect on the plants this year than it had last.

The effect of water on plants, regularly supplied, is most wonderful. Those who have seen the Clipston water meadows, and the small and clear stream, which produce from three to five crops of grass per annum, either depastured or mown, or partly the one and partly the other, must be convinced that it is almost as much owing to the plentiful supply of water in a dry season, as to any great amount of

manure held by that small river in solution, that the vast increase of grass is produced. By watering, Mr. Kennedy, of Myremill, keeps close upon a thousand head of stock on ninety acres of Italian rye-grass. In ordinary seasons, from five to nine sheep can be kept on one acre of land; the latter may be done in a dropping season, on clover lays, on well cultivated land; but with the aid of a little artificial food and by the application of *liquid* manure, in the shower form, by steam, Mr. Kennedy can keep fifty-six sheep per acre! Nor can we believe that this is altogether due to the manure. To that it is partly owing, doubtless; but it is by far more owing to its being watered with that manure in a soluble state, and so fit for the immediate use of the plants. Hence he is independent of season. The water-drill, to which we before alluded, is an application of the same principle; and the wonderful results of the dressing of dissolved bone liquid, in a dry season, by the Duke of Richmond, is a powerful fact in the same direction.

That it is the want of soluble manure, or, in other words, elements of plants, which is mainly the cause of the injury, is manifest from the fact that all the poorest land has suffered by far the most from the drought. The very highly manured land has sustained the least damage; while on land to which very highly soluble manures, Peruvian guano, for instance, and similar materials, have been applied, the crops are growing vigorously.

Nor let it be forgotten that the rain brings down the ammonia, which, in dry states of the atmosphere, will float undisturbed; and this failing, as well as the soluble supply below, would of course aggravate the cause of injury.

THE SEASONS.

FROM THE GERMAN.

Hay and corn and buds and flowers,
Snow and Ice and fruit and wine—
Suns and Seasons, sleets and showers,
Bring in turn, these gifts divine.
Spring blows, Summer glows,
Autumn reaps, Winter keeps,
Spring prepares, Summer provides,
Autumn boards and Winter hides.
Come, then, friends, their praises sound;
Summer, Autumn, Winter, Spring,
As they run their yearly round,
Each in turn with gladness sing!
Time drops blessings as he flies—
Time makes ripe, and Time makes wise.

INDIAN CORN.

BY CHARLES L. FLEISCHMANN.

The following article is from the *American Polytechnic Journal*, and furnishes a mass of information in relation to our great staple, which cannot but prove interesting. — *Working Farmer*.

The repeated loss of the potato crops by rot, on the European continent, has caused the various governments of Germany to seek to provide a substitute for that useful root. Among all the known agricultural vegetable productions none seemed to supply the place of the potato so well as Indian corn, and extensive experiments were ordered to be instituted to ascertain how far north this plant can be raised there, and which is the best mode of culture, the best place in the rotation of crops, and its application as food for man and beast. Professor Von Lengerke collected the results of the various experiments made in Germany, and published them in a work entitled "Anleitung Zum Anbau des Mais." Berlin, 1851. We give here some extracts from this work, which may be, perhaps, of interest to corn growers.

Indian corn has been sown in Spain since the time of Philip the Second (1555—1598.) The Italians and French became acquainted with it about the same time, and it was also introduced into Turkey, from whence it became known among the people inhabiting the banks of the Danube. Hungary's alluvial soil seemed to be particularly well suited to it, and from there it made its way into Styria under the name of Turkey wheat; from Lombardy it was taken to Karinthia, Tyrol, and from thence it was carried over the mountain into Germany, where it was raised in gardens up to the 16th century as a curious plant.

Wurtemberg, Baden, Alsace, were the first countries of Germany where the Indian corn was extensively planted, and since the potato rot it has been tried in higher northern latitudes than those first mentioned.

The oldest name of the Indian corn on the continent of Europe is *Fromentum turcicum*, Turkish wheat. In Portugal and Spain it is called *maiz*, in France, *Ble d'Espagne*; in Holland, *Indiaanish*, Turkish korn; in England, Indian corn, also Turkey corn; in Sweden, *Turkist tvele*; in Russia, *Kukuraza*; in Hungary, *Kukurioza*; in Italy, generally, *Fromentone*, viz: big wheat, also *Grano turco*, Turkish wheat; in Germany, *Welsch Korn*,

or *turkscher weizen*, Italian or Turkish wheat. Mr. Von Lengerke divides, according to Metzger, the Indian corn into two varieties. A. *American maize*, (*zea altissima*, *zea hirsuta*, and probably also *zea carragua*,) and into B. *European maize*, (*zea mais*, *zea pracco*, L.,) which he has sub-divided again into

1. *Big maize*, seven to eight feet high, very long ears with eight to twelve seed-rows, large broad seeds; of which there are three varieties, *a*. the white big maize; *b*. white and yellow big maize; *c*. big yellow maize. These varieties are extensively raised about Kehl and Strasbourg and the upper parts of the Rhine.

2. *Common maize*, four to six feet high, short cob, eight to fourteen rows of seeds, the kernel somewhat round, the rows are not very regular. Several kinds of the yellow common maize are very extensively raised in the south of Germany, *b*. white, *c*. light red, *d*. blood red, *e*. dark red, *f*. blue, *g*. variegated, &c.

3. *Maize with pointed ears*, four to six feet high, cob short and small, pointed, from twelve to twenty rows of seeds very densely set, the kernel small, *a*. yellow, *b*. red, &c. blue pointed maize.

4. *Short ear maize*, five to six feet high, with a very short blunt cylindrical cob, and the seeds are set in irregular rows. It was introduced from Spain and is not much valued.

5. *Broad cob maize*, five to six feet high, the cob somewhat flat, short, blunt, sometimes on the top divided; the seeds stand in irregular rows, the kernel small and round; is much planted in Styria, but is not as productive as No. 1.

6. *Branching maize*, with branching cobs, appeared to be an accidental production.

7. *Cinquantino maize*, four feet high, the cob short, thick; *a*. of less diameter towards the top, generally twelve rows of seed, somewhat flat. It is extensively cultivated in Italy, where it is called Cinquantino, from the fact that it ripens in five months. It ripens in Germany a fortnight sooner than the common maize.

8. *Dwarf maize*, three feet high, the ear sometimes only three inches long. It ripens very early, generally four weeks sooner than the common maize of Germany, and is planted in regions where the common maize does not succeed. It is not constant, it changes, the cobs get longer, the plant taller; this is especially the case

when planted with other kinds of Indian corn.

American species of Indian corn have been extensively tried in Germany, but the most intelligent maize planters are of opinion that the German maize is much better suited for their climate than the acclimated American Indian corn, which requires much higher temperature to ripen. The American Indian corn has proved, however, very advantageous as green fodder, and the Prussian government recommended the importation of American Virginia gourdseed corn, for that it surpasses the German maize in its yield one-third to one-half.

A Mr. Von Plotho produced a new kind of Indian corn in the following manner. He planted gourdseed corn first, and six weeks after, the Baden maize (of the dukedom of Baden) in the rows between the former, and when the Baden maize produced the stamens, they were cut off, so that its pistils or silk received exclusively the pollen from the American Indian corn. The latter part of the summer (1850) was very unfavorable to the growth of maize, still Mr. Von Plotho obtained a considerable quantity of the new variety of maize, and was enabled to continue and extend his experiments the following year.

It is a general rule that the maize will succeed in regions where the vine is grown with advantage. Early kinds have been raised in Mecklenburg, on the shore of the North Sea, and in the valley of the upper Rhine. It arrives at perfect maturity near Trons, 2,650 feet above the sea.

PLACE OF THE INDIAN CORN IN ROTATION OF CROPS.

After clover, tobacco, beans, hemp, summer barley, Indian corn is always found to succeed well. In the vicinity of Gratz, in Styria, the rotation of crops is, 1. Indian corn; 2. Summer barley with clover; 3. Clover; 4. Winter wheat or rye. In the wheat stubble they plant turnips; and in the rye stubble, buckwheat. Others again have rotations of six exchanges: 1. Indian corn manured; 2. Barley or oats with clover; 3. Clover; 4. Wheat stubble, turnips, with a light manuring; 5. Beans or peas; 6. Rye, and buckwheat in the stubble.

In the vicinity of Innspruck, in Tyrol, maize has been raised for thirty-six years in succession from the same field with continual success.

This is rather contrary to the ingenious theories of the excrements of plants and the necessity of rotation of crops.

A Professor D. Bohm raised wheat for thirty years in the same field, and he had every year a fine crop. To manure often, and to manure well, is the key to this secret.

Von Ludersdorf recommends potatoes as the best preparatory crop for maize.

Experiments have proved that the human excrements (Taffeh) are the most effectual for maize. Taffeh is the Chinese term for that kind of manure, and Burger recommended this word forty years ago to the agriculturists as a substitute for the disgusting name we give it generally.

Woollen rags have also been used with great advantage to manure Indian corn, but since the old rags are again worked up into new cloth, they became too costly to use them for that purpose.

In Italy, Franche Comte, Burgundy, in some parts of Hungary and Styria, the maize is sown broadcast. It is either ploughed or harrowed in.

In Germany it is planted in rows with the hand or with drill machines.

Ludersdorf planted Indian corn in rows sixteen inches apart, and the plants in the rows six inches. When the plant formed the tassel, he had every other plant removed, and gained about forty-two and a half cwt. green fodder per Prussian acre. Dense planting seemed in the beginning not to influence the yield on corn, all remaining plants had well formed and fine large ears. Perhaps this mode of planting would present some advantages, especially in dry spells.

Burger made experiments as to the depth at which maize should be planted, and he found that maize planted one inch deep sprouted in eight and a half days; kernels planted four and a half inches deep, in thirteen and a half days. All those which had been planted much deeper did not come up at all.

I consider the greatest fault of the German mode of cultivating corn, that they plant too many other agricultural plants between it.

The most common and most advantageous of the plants between the rows of corn is the dwarf bean. In Alsass, Styria, they are very extensively cultivated with maize; the hoeing and cultivating is done by hand.

Burger invented a corn drill, which drops between every two maize seed three or four beans.

In Karinthia the beans are planted separately; in the maize field between every sixteenth or twentieth row of maize they use two rows for beans. This method has

the advantage of allowing the air more circulation among the corn and accelerates its ripening, the beans are sooner gathered, and the vacant places can be ploughed and the corn transferred to the ploughed rows, in order to give access to the plough to prepare the ground for wheat.

Pumpkins (*curcubito pepo*) are much raised among Indian corn in Styria, Hungary, and Italy. In Karinthia, the pumpkins are raised in the same way as the beans; after nine to eleven rows of maize a row of pumpkins is planted. In some places they plant hemp and tobacco between the maize; in Wurtemberg and Baden the farmers plant beets, cabbage, and the like. Peas are also very advantageous among maize intended for fodder.

In Wurtemberg, maize is sown with stubble turnips; it is cut for fodder before the stubble turnips arrive at their full growth; it is still better to plant the maize in rows between the turnips; the turnips succeed very well, because the maize protects the delicate turnip plants in their first stage of growth.

In Styria the farmers remove all side or root shoots, and all the plants which produce no ear cut out. *In Styria. Crain and Karinthia, the stamens, after their object is secured, are cut off; this is done when the grain has reached a certain degree of firmness. In Tyrol, this procedure has been entirely abandoned, because it was found that it was injurious to the crop, and it caused, besides, much labor for cutting and collecting the tops.*

In Alsace some farmers are against top-ping; others say in wet seasons it hastens ripening, and they continue to top.

Ludersdorf remarks that maize can support more heat and drought than other plants; he says, "this property must be ascribed to the structure of the plant, the leaves surround the stem like a sheath, and project from the stem in an acute angle, the dew and rain glides along the furrowed surface of the leaves and accumulates around the stem; in dry spells the dew collects there and assists the plant to support a long period of drought." And he mentions as a very striking proof, that in the year 1847, when the first trials with Indian corn were made near Berlin, (Prussia,) maize was planted upon a high situation among a large field of peas. The drought destroyed the peas entirely, but the maize grew luxuriantly. It yielded a large quantity of green fodder, for which it was planted.

To prevent, in the spring, the night frosts which injure the young maize, the Tyroleans, on the slightest indication of cold, make fires in the maize field and raise smoke, which has always proved a good preventive. In the spring of the year 1851, I was in Styria and saw such fires. The smoke being like a heavy canopy over the valley, and it seemed to prevent the cold air from the mountain penetrating it.

In Germany maize suffers only from the brand; the ear swells up and the husks turn a silvery grey; in the beginning the interior of the diseased ear is filled with watery excretion, which turns by degrees into a black powder.

The late time of blossoming of the genuine American Indian corn makes it particularly adapted to green fodder, and it is in every respect preferable to the European or acclimated American maize. The former grows very tall before the blossoms develop themselves, and the stem is at the time of cutting still very tender.

Maize has the excellent property that the cattle never suffer from over-eating. It is said it causes dysentery, which is, however, prevented by cutting the stems in pieces, say six, eight, or ten inches long, and soaking them in water a few hours before they are fed out; the water mixed with the juice of the maize stems is much liked by the cattle. The milch cows improve by it in their milking qualities.

In Styria green maize is always fed with dry fodder; the cattle seem to have a desire for hay and straw whilst they are fed with green maize. Experiments have shown that cows lose much in their milking qualities when fed entirely with green maize, but when hay is added they regain it soon again.

The American maize has been found not so favorable to the production of milk as the native maize.

Maize does not feed much better than old clover and lucerne.

In Karinthia the horses are fed with maize which is soaked in salt water; its nourishing quality is considered to that of oats 2: 1.

Von Ludersdorf made experiments with maize as to the production of sugar.

One-third Prussian morgen of land was planted in American maize, the rows were eighteen inches apart and the plants in the rows twelve inches. After the blossoming was over the maize was cut; it yielded sixty cwt. green maize. After the leaves were removed, the stems weighed thirty-

six cwt.; the weight of the stems was to the leaves as 3: 2. A Prussian morgen would yield one hundred and eight cwt. of stems ready for the mill.

The best time to use the stem for sugar is after blossoming. He ascertained that the specific weight of the juice was $1.017=40$ Beaume. At the time when the stems begin to develop themselves, the green stem gave eight per cent. dry substance. When the maize was in full blossom the specific weight of the juice was $1.044=5$ Beaume; the green stems yielded 12.7 per cent. dry substance. At the latest period of blossoming, the specific weight of the juice was $1.017=6\frac{1}{2}$ Beaume, and the green stems gave eighteen per cent. dry substance. At the time when the seeds were formed, but yet in milk, the specific weight of the juice was $1.050=7$ Beaume, and the green stems yielded 23.8 per cent. dry substance. In the fifth stage, when the ears began to ripen, and when the seeds turned yellow, the juice weighed 1.055, or $7\frac{1}{2}$ Beaume. It had on dry substance 26.8 per cent.

Ludersdorf found that maize contains in all its stages of vegetation a larger proportion of grape sugar than cane sugar; and he thinks that these circumstances make it impossible to use the maize for the production of sugar. The quantity of cane sugar, according to his experiments, would not amount to four per cent., and the difficulty of extracting the sugar from it makes it impossible to employ the maize for that purpose.

The experiments made, as to the weight and volume of Indian corn, have shown that those seeds are the heaviest which are placed in the middle of the ear. The lightest are on the tops.

That the weight of the seed varies according to the kind of maize; the mean weight of thirty seeds of various kinds varied from sixty-four to two hundred and ninety grains. The American corn on an average was one-third heavier than the German or European species.

CHARCOAL AND SALT FOR SHEEP.

"It is generally conceded that wet-pastures are unfavorable to the health of sheep. I have kept a flock for four years in a pasture of this description—for the first two years with unfavorable results. My sheep were unhealthy, and many of them died. I ascribed it to the wetness of my pasture.

Upon the recommendation of an old farmer, I gave the sheep charcoal mixed with salt. The beneficial effects of this mixture were soon apparent. My sheep presented a more healthful appearance. I have continued the treatment, and the animals have continued to thrive. I suppose the medicinal qualities of this mixture consist in the disinfecting property of the charcoal."

And, in the invaluable tonic and alterative properties of the salt, we may add; for, like many other remedial agents, this article, when given in small doses, augments the digestive functions. In larger doses it is cathartic.—*North Western Cultivator*.

For the Southern Planter.

SHEEP.

Mr. Editor.—In your note on my communication, in your September number, you ascribe to me ideas not warranted by it. You surely could not have read (carefully, at any rate,) the part you comment on. I did not, as you charge, ascribe the remark to Mr. Campbell; so far from it, I complained that he ascribed it to me—that the French Merino "will not, or are not allowed to breed before they are three or four years old." I have not the volume or number in which the letters to Mr. Rives were published, the binder unfortunately having lost or mislaid it. My remark was on the note attached to it, which did not claim to be from the Editor; but if you will examine it in your last December number, you will find, I think, the note somewhat in these words, or to their effect. I commented on it with that understanding of it. "These owners of the French Merino keep the ewes until three years old, the bucks four, before they are permitted to copulate." This sounds like a statement of an "absolute fact."

Mr. Campbell's communication, in the July number, makes me say in your March number that "it was necessary to wait three or four years before they will breed." So far from saying so, it could not even bear such construction; and that was what my September number complained of. I did not, as you charge, ascribe the note or the saying to Mr. Campbell. I was not even commenting in the March number on Mr. Campbell's writing, but on the communication of, and letters to, Mr. Rives, in your December number, and, of course, could not have ascribed it to Mr. Campbell. In your September number was my first and only reply to him, and that was to his, in your July number. Now, let me ask you to read your note in the December number—compare it with my comment on it—then Mr. Campbell's remark, as quoted by me in this, and

compare mine, on the same subject in the March and September numbers, and see if both you and Mr. Campbell have not ascribed ideas to me never expressed by me, or could be construed so by any language of mine. I never ascribed the information about not permitting them to copulate until three or four years old to Mr. Campbell, as you charge, and never expressed the idea that they must acquire that age before they would breed, as charged by Mr. Campbell in his July number. I am altogether as unwilling to do Mr. Campbell injustice or you either, Mr. Editor, as I am to have injustice done me by either of you.

Mr. Campbell says, when the market for breeders is supplied "I see no reason why they will not be sought for as a mutton sheep." Again; "for wool and mutton combined, I consider them a valuable animal, but for wool alone, I believe there are other breeds of the Merino that will be quite as profitable to the wool grower." Now in this I can find nothing "stating, distinctly," (and it is all he does say on the subject,) as you ascribe to him, that "for mutton alone there are better sheep than the French Merino," or "that they are the best for the combination." Now, unless he or you or any person else can show (which no man pretends to) that more money can be made every year by both wool and carcass combined—and that is the only way to calculate for general farm purposes, not by calculating the sales of breeding sheep sold for their blood, against the sales of yearling part bred muttons, but by sales of mutton and wool of the same age and growth—I cannot yield the point. My friend in New York, after showing my fleece to a dealer in wool, writes me, "I can get fifty cents per pound"—and this is all Mr. Campbell claimed for his per pound, and six pounds for weight of fleece, I think, in his January number. Now, which yields the most money per fleece, and will the sales of yearling muttons of these two competing sheep compare? I am calculating, of course, for the profit to the farmer, not your fancy taste for muttons. I do not ascribe your strengthening Mr. Campbell's position and detracting from mine to any other feeling than tendency against Cotswolds and a cursory reading of the pieces from a press of business consequent on your engagements. I would not have burdened your columns again now had not such decided injustice been done me, nor do I ask a reading by you of the whole pieces; but think if you would examine the particular points referred to you will see I am right throughout.

In the commencement of your second note you take pains to defend Mr. Campbell from the charge of humbug as made by me. I deny making any such charge. I only said, "it appears like a strong tendency to humbug the Virginia farmers," and in your conclusion you directly charge me with humbug about the merits of the Cotswolds "as stated" by me. Now, sir, I mean to meet this charge. Where is this humbug in my statement? Had

I made my calculations on the value of my breeding sheep, at high rates, there might, from the variety of opinions held by different persons, have been some color for such a charge, but did I not base all my calculations on their value for "general farming purposes" alone? In doing so, did I not rule out of my calculations all my sales for breeding purposes? Did I not go further, and rule out all extra sales of extra muttons and all extra offers to feed muttons to an extra point as being extra from general farming purposes? and applied the fleeces to the keep of the animals, instead of calculating it in their value—in every case, putting the disadvantage to the sheep, not even calculating the highest sales of muttons. Did I not base my calculations, not on theory or imaginary value, but on absolute sales of yearlings and only part bred muttons and on ordinary treatment, to the butchers in August and September, who, before purchasing, saw and handled them and took them from the farm at from eight to ten dollars each? Could any thing be fairer than this? Could any mode more fair be adopted to ascertain their true value for general uses? If this was a humbug, it must have been an imaginary value. If so, how does it happen that the same butchers, after buying, slaughtering and selling, came back, not one year, but year after year, to purchase the same kind at the same, nay, at advancing rates, and anxious to engage them beforehand, and so anxious to get them, that not one is ever left to reach two years old, if they can be bought? Every one that could be, was bought up this year in August—none under eight dollars, many ten dollars each; even lambs six dollars each, where their owners would sell—and not complaining, but urging an opportunity to make an offer next year before a sale to any other person. Call you this humbug? What other breed of sheep is there that would not be glad to show such a state of things? If butchers, after buying, slaughtering and selling, year after year for many years, a kind of mutton that proves each year deceptive and not a profit, and still continue it, they are certainly much more stupid, indeed much more suited to a lunatic asylum than you will find them to be when you undertake to sell them your favorite breed of sheep. No, sir, rely upon it there is no humbug, nor can we be overstocked with such sheep, for the butchers are willing to take standing bargains at such prices, and the extra ewes to slaughter with them. What other breed of sheep is there that would not rejoice to show such a state of things?

Now, sir, for a bolder position than I have yet taken, and you shall be the judge. You are a farmer, and of course have good stock; I will compare my sheep, per head, (and only take part breeds,) with your cattle (no matter of what blood) for general farming purposes, i. e. for meats, not breeding purposes. Are you not willing to take for your cattle eight dollars for each year of his life—eight dollars for first sixteen dollars for second, twenty-four dollars

for the third, &c.—not corn fed? Take from this the cost of his keep—for the wool of my sheep more than pays his keep, of which your cattle has none to pay his—my yearling mutton, part bred, sells every year at not less than ten dollars each, clear, the wool more than paying keep—and surely you will not contend that a number of sheep cannot be kept on the keep of one steer. If I have not allowed enough, state the allowance yourself for your steer and take off the cost of keep from either my allowance of eight dollars or your claim, whatever it may be, to equal the wool, and say which is the most profitable for general farming purposes, *per head*, your cattle or my sheep? Which is the profitable animal, net, to the farmer? You may calculate and decide.

I have stated facts of every year's occurrence in Clarke—absolute sales, made by all in Clarke who have crosses of this blood—known by all in Clarke to be the lowest sales made in August and September—and where can be the humbug in it?

JOSHIAH W. WARE,
Near Berryville, Clarke Co., Va.

September 9, 1853.

We shall reply to this letter of Col. Ware's at our earliest leisure.—ED. SO. PLANTER.

NEW USE FOR CLAY.

Farmers have probably always known, that clayey soils were more retentive manures than sandy soils. In other words, a cord of manure put upon a given surface of clayey soil, would last longer, and give out its fertilizing properties more gradually, than the same amount of the same manure would, if put upon a given surface of sandy soil.

It has also been long known, that clay is an absorbent of gases, and that putrid substances buried in it have their noxious exhalations completely neutralized, by the clay absorbing them.

Recent experiments made in England by Professor Way, an agricultural chemist, have demonstrated the fact, that clay will completely absorb, or take the ammonia from water, and many other substances, and retain it.

For instance, if some *aqua ammonia*, water impregnated with ammonia, should be filtered through clay, it would be found that the water would pass through pure, while the ammonia has stopped by the way.

On the other hand, should the same water of ammonia be passed through sand,

it would be found but little changed, if any. We all know that clay will also absorb water, and retain it with considerable tenacity, while sand will not. Hence, the addition of clay to sand soil improves it in two ways, viz: mechanically and chemically; mechanically, by making it more adhesive, or giving it more consistency; and chemically, by giving it power to absorb and retain ammoniacal, or the gases which arise from the decomposition of organized substances.

It must, therefore, be an advantage to keep clay pulverized moderately fine to scatter over dung heaps, and throw into privies and cesspools, in order to absorb the ammonia which arises, oftentimes, in such places, and thereby neutralize the offensive odors, which, unless arrested in some such way, become diffused throughout the air.

Plaster of Paris, pulverized charcoal, dried peat, and such like substances, have been generally used for this purpose, and they are very good; but, where these cannot be readily obtained, a quantity of clay dried and crumbled will serve the same purpose.

It is thus converted to a cheap, and very efficient manure holder for the farmer.

More experiments are needed, in order to ascertain and demonstrate more clearly the laws which govern the action of clay in this respect. Such experiments will, undoubtedly, corroborate what general knowledge we have, but also give us more particular practical knowledge, that will be of great value to us.—*Maine Farmer*.

From the Boston Cultivator.

SALT FOR WIRE WORMS.

At a late meeting of the New York Farmer's Club, Professor Mapes, according to the *Agricultor*, said:

"I kill all worms with salt, and so do my neighbors who use it; some do not, and they are troubled. Sanford Howard says wire worms love salt—will live in brine—mine wont; six bushels of salt to the acre gives them a quietus."

In the *Working Farmer* for May, Prof. Mapes says:

"Use six bushels of common salt per acre, on fields intended for corn, a few days before planting; this will do away with every grub, and unless the wire worms be

the kind *pickled* by the Editor of the *Boston Cultivator*, it will destroy them also. We had almost persuaded ourselves to doubt our own senses, when told by Mr. Howard that wire worms were not injured by salt, until we found that many worms existed of this species, and that the hard cream colored wire worms about the size of a knitting needle in thickness, which had annoyed us before using salt; had also been destroyed on other farms beside our own, by the use of this remedy."

In the first of these extracts it is asserted that "Sanford Howard says wire worms love salt," &c. This is untrue. The individual mentioned never said anything of the kind. He never said wire worms "will live in brine," but has said and proved that they would live in earth which had been salted. Others have said they would live in brine. Some years since an article appeared in the *New England Farmer*, in which it was stated that a gentleman in New Hampshire had made some experiments with salt on wire worms. Supposing that H. F. French, Esq. might be the gentleman referred to, we wrote to him on the subject. In his reply, under date of March 26, last, he says:

"I have never myself made any careful experiments with salt to learn its effects on worms. My friend, Professor Joseph G. Hoyt, had his garden so full of wire worms that they destroyed his seed potatoes. He made a saturated solution of salt in water, and put a handful of the rascals into it, and let them remain two hours, and they not only lived, but appeared as happy and sprightly at the end of the time, as at the beginning. He was satisfied that salt produced no effect on them when applied to the land."

Many insects, while in the larva state, have a remarkable tenacity of life, and are not killed as easily as some persons state. A writer in the *Mark Lane Express*, a few years since, stated that he had tried the effect of the most corrosive and powerful poisons on wire worms. He says:

"Preparations of corrosive sublimate and arsenic were used in vain. Their immersion in solutions of these poisons occasioned them no inconvenience. I then tried the effect of vitriol and aquafortis; these liquids certainly destroyed the worm, but only after a very considerable time."

These experiments, in connection with those of Professor Hoyt, will answer in relation to Professor Mapes' sneer against wire worms living in brine. But there is

other evidence against the idea that "six bushels" of salt to the acre, or even a much larger quantity, will kill wire worms and several other species. Some years since, J. J. Thomas, a gentleman, whose statements may be relied on, stated in the *Albany Cultivator* that he put salt round cabbage plants—in some instances in a ring round the plant, about an inch wide and a quarter of an inch thick, and in other cases sowing it thickly round and in contact with the stems of the plants. "In neither case," he says, "did the worms pay the least attention to the salt, but walked right through and destroyed the plants. In one instance a cut worm was found, after having eaten off a plant, quietly reposing, with all the apparent ease and indifference of a philosopher, in a white bed of nearly clean salt."

The individual alluded to by Professor Mapes, has tried salt in various ways as a remedy against the attacks of worms. In one instance he made an experiment by putting cut worms, wire worms, and others, into a stone jar with earth, and salted the earth at various times. The salt was applied at first at the rate of six bushels to the acre—applying at the same time water enough to dissolve the salt. After a few days, the earth and worms were emptied out of the jar, for the purpose of ascertaining the condition of the worms. As they were not in the least affected by the treatment, they were put back, and more salt applied. After a proper time they were again examined, with the same results as before. The salt was ultimately applied at the rate of over forty bushels to the acre, but without its having any effect on the worms. The experiment at this stage was broken off by an accident, so that the precise quantity of salt necessary to kill worms in the soil was not ascertained; but as *forty bushels to the acre* had no effect, it is reasonable to believe that at least three times the quantity would have been required to destroy them.

We are preparing, now, to repeat these experiments, and shall publish the results. In the mean time we would ask the public to compare the facts given in support of our position, with counter statements which have no better basis than very loose guess work.

The insect alluded to under the name of wire worm, is, doubtless, the same as that described by Prof. Mapes as of a "cream color," &c. although we do not understand what he means by there being "many worms of this species."



THE SOUTHERN PLANTER.

RICHMOND, NOVEMBER, 1853.

TERMS.

ONE DOLLAR and TWENTY-FIVE CENTS per annum, which may be discharged by the payment of ONE DOLLAR only, if paid in office or sent free of postage within six months from the date of subscription. Six copies for FIVE DOLLARS; thirteen copies for TEN DOLLARS, to be paid invariably in advance.

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☞ Subscriptions may begin with any No. ☞ No paper will be discontinued, until all arrearages are paid, except at the option of the Publisher.

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NOTICE.

☞ If subscribers do not order a discontinuance of the Planter before the commencement of a new year, or volume, it will be considered as a renewal of their subscriptions, and they will be charged accordingly.

☞ It is indispensably necessary that subscribers ordering a change, should say *from* what, *to* what post office they wish the alteration made. It will save time to us and lose none to them.

POSTAGE ON THE PLANTER,

When paid quarterly or yearly in advance.

To any part of the United States 1½ cents per quarter, or 6 cents per annum.

WARNING.

Those of our subscribers who are in arrears most not find fault with us if they find their bills in the hands of collectors for the full amount of our terms, \$1 25 per annum. We cannot afford to print a paper at \$1 a year and pay twenty per cent. for collecting.

ENCOURAGEMENT TO THE PLANTER.

As the Editor of this paper never blows his own horn, he begs that he may be excused for permitting it to be sounded by one of his friends. Sincerely obliged, as he ever is, to those who aid him with subscribers, he is the more grateful in this case, because the kindness proceeds from one who is personally a stranger to him, though well known for his enlarged views and public spirit in another sphere, and noted as one who has striven earnestly and ably for the advancement of Virginia even to the extent of taking ground (and successfully maintaining it) against the general views of the section he hails from.

In expressing thanks for the subscribers thus enrolled, and in making acknowledgments for the commendation bestowed upon our efforts, it gives us pleasure to say that we claim at least as much credit for having called out such farmers as "Incog," speaks of as in anything else we have done. And, finally, we would observe—we hope not impertinently—that whilst we never expected to work for nothing, and would have no objection to making a fortune by the Southern Planter, yet that money alone cannot pay us for the part we are endeavoring to play.

Whilst none but the affluent can afford to lose sight of private interests, the poorest citizen *ought* to carry into public enterprises as much desire for public good as for private gain. Those who do so have certainly this advantage over the sordid: if their labors are approved then they have not lost their reward even though it be not paid in coin.

To the Editor of the Southern Planter:

I transmit you twenty dollars, being amount received for as many new subscribers to that invaluable monthly, the Southern Planter—the result of a small effort called forth by your circular appeal to the individual subscribers to the paper.

This list was obtained almost without an effort; and the facility with which it was done shows how easy a thing it is to place this, the only agricultural journal in the State, on a permanent basis, and to enlarge its usefulness and value.

This county, in point of area, is the smallest in the State, and yet in a day or two, with perfect ease, twenty subscribers were obtained within its narrow limits. Now, I take it that what has been done in this little county—not as large as a precinct in Loudoun or Augusta—

may be very easily done *in every county in the State*. And I am entirely sure, that there is, in every county in the State, *at least one man of position and influence enough to procure at least twenty subscribers to the Planter*. The only question is, will that one man undertake the task?

If these premises be right, let us see to what results we are led.

There are in the State, I think, 140 counties, and in that 140 counties, according to the assumed data, as many persons capable of procuring each 20 subscribers. Multiply 140 by 20, and we have 2800 as the number of additional subscribers—a number, I presume, that would go far to put the paper on a substantial footing.

But much more than this number can be easily had.

There is not, I think I can safely assume, a single present subscriber, who has not influence sufficient to procure, at the least, *one other subscriber*. I never saw the man yet who had not powers of persuasion enough to effect so small an object. Then, let every present subscriber resolve to himself to get at least one other comrade, and the success of the paper is a "fixed fact."

I have not a doubt that every existing subscriber can, if he will take the pains, obtain, on an average, *five* new subscribers. At this rate, the paper could be made a vehicle of agricultural information equal to any in the Union, and worthy of our State.

All that is wanting is a *fixed plan, some determinate system*. Let the plan here suggested be but tried. Let every individual who has influence enough to get 20 subscribers, go to work and get his 20. Let every one who can command his ten, get his ten. Let him who can get five, strike for five. Let him who can bring up two to the light of agricultural knowledge, bring up his two. But above all, let each and every present subscriber firmly resolve to do his best to *get at least one additional subscriber*, and the result will be the triumphant success of the only agricultural press we have, and an ultimate public good which not all the politicians and political papers put together can ever dispense.

Will the thing be attempted? That is the important inquiry.

Surely, it will be. State pride, if nothing else, should induce the effort. Shall we be dependent upon the North for our agricultural reading, as we are for our brooms and curry-combs, and almost every fabric of domestic consumption? And while the Northern States sustain scores of agricultural journals, shall we fail to support one?

Not State pride only, but individual interest, requires us to establish the Planter on the best possible basis.

It is now as well settled as the existence of light and heat, that nothing depends more on the application of scientific principles than agriculture. There are, it is true, some old fashioned prejudices against what is termed

book-farming, but the impoverished acres and hastening poverty of those who reject science in the cultivation of the soil, are furnishing every day the best commentary on those prejudices, and fast curing people of the delusion. How important, then, is it that we have among us a good agricultural paper to convey to those who till the soil the teachings of science in that most important regard? Or if actual experience and "nothing shorter," be insisted on, how can we collect the experience of practical farmers except through the pages of an agricultural journal, to which each one that chooses may contribute the results of his actual experiments?

There is another and a high motive to the general circulation of agricultural papers among the people: it tends, by substituting agricultural for political reading, to take from politics its absorbing, monopolizing character, to withdraw gradually public attention from this irritating subject, and to repress, of course, that violence of party spirit which has so disturbed our social organization, and so seriously interfered with our domestic interests. I know of more than one person who has been cured of his love for politics by reading the Planter.

As a matter of interest, every man in the State who cultivates ten acres of land, ought to subscribe to the Planter. There is not a number that is not worth the dollar that is asked for the year's subscription.

Your "Dollar's Worth on Hogs," in the May number, has been worth the present season to the writer of this, twenty times, yea, fifty times the amount of my subscription. There is not a letter of Mr. Edmund Ruffin, of Rev. Mr. Fife, of Mr. James Newman, or of Mr. Willoughby Newton, that is not worth a year's subscription. I would not be without it for any consideration, nor exchange it for all the political papers in the State.

I am no farmer, Mr. Editor—hardly know the first move, being merely a beginner: those who know me tell me I'll never make a farmer—a thing I don't intend to believe just yet; but though not a farmer, I desire ardently to be ranked in that honored class; and farmer or no farmer, I cherish a deep concern for the agricultural advancement of the State, and that concern has emboldened the humble writer of this article to venture this appeal in behalf of the Southern Planter.

By the way, while on the subject I may as well state something that may prove of practical service to those who read the paper. As I read a number I index in a blank book the more important contents, so that I can in a moment refer to any subject treated of in any number without the labor of looking through the printed indexes at the end of each volume. For example, under the head of *Guano*, I put down every thing relating to that subject, noting the number and page; and so of other subjects. By this plan, I am enabled to bring into ready use any information the whole work contains. For instance: I am now using gua-

no, and before commencing, I referred, by means of my index, to every article on the application of guano scattered through the numerous numbers of the Planter, and having satisfied myself of the best mode, adopted it.

Incog.

Elizabeth City Co., Oct. 17, 1853.

VIRGINIA STATE AGRICULTURAL SOCIETY.

At a meeting of the Executive Committee of the Virginia State Agricultural Society on the 7th October, 1853, present P. St. Geo. Cocke, President; Harvie, Boulware, Overton, Booth, Irby, Peyton, F. G. Ruffin and Ch. B. Williams.

Resolved, That the following committees be appointed to confer with the several rail road and other transportation companies respecting the terms on which they will severally transport to and from the Fair, to be held in November next, the members of the Society and animals and articles designed for exhibition, viz. Gen. B. Peyton, to confer with the Manassas Gap, Orange and Alexandria, and Virginia and Tennessee Rail Road Companies; Col. C. Q. Tompkins with the Steamboat and Packet Boat Companies on the Bay and River routes; Mr. E. G. Booth with the South Side, Petersburg and Roanoke, and City Point Rail Road Companies; and Mr. Frank G. Ruffin with the Richmond, Fredericksburg and Potomac and the Richmond and Petersburg Rail Road Companies; and that they report the result to the Recording Secretary for publication.

Resolved, That Col. C. Q. Tompkins be authorized and requested to make arrangements with the exhibitors of machinery for the space to be occupied and the kind of structures, to be erected by them at their own expense, if such structures shall be necessary for their accommodation; and also to erect, at the expense of the Society, such additional structures as he may deem necessary for the favorable exhibition and proper security of the miscellaneous and small articles of machinery and implements which may be offered for that purpose.

Resolved, That Messrs. Cocke, President; C. Q. Tompkins, Harvie, Frank G. Ruffin and Peyton be a committee to prepare rules for the regulation of business and the preservation of order within the enclosure of the show grounds during the progress of the exhibition.

The Corresponding Secretary read a

letter from the Commissioner of Patents of the United States, presenting fifty copies of the Reports of that department for 1852 and 1853 for distribution as premiums at the next Annual Fair of the Virginia State Agricultural Society; whereupon,

Resolved, That the Secretary be directed to express to the Commissioner of Patents the grateful acknowledgments of the Committee in behalf of the Society.

Resolved, That Messrs. Cocke, Harvie and Williams be a committee to make all arrangements they may deem necessary with respect to the show grounds.

The following persons were delegated to attend the Maryland State Agricultural Exhibition as representatives of the Virginia State Agricultural Society, viz. Messrs. P. St. Geo. Cocke, L. E. Harvie, William Boulware, Wm. W. Crump, C. Q. Tompkins, D. W. Haxall and Thos. Ritchie, Jr.

Adjourned to meet on Saturday, the 29th instant, at 6 o'clock, P. M.

CH. B. WILLIAMS, *Rec. Sec.*

For the Southern Planter.

GUANO.

Mr. Editor.—The high price of guano seems to cause great dissatisfaction among the consumers of the article generally, and several plans have been proposed for the reduction of the price, so as to enable farmers to obtain it at a fair and uniform rate. Now, it is a question of some importance, to determine who is to blame in this matter; whether it is the Peruvian government agents, their sub-agents, the speculators, or the farmers who are the consumers of the article. It is the interest of the Peruvian government to dispose of their guano on the most economical principle: and it would be absurd to suppose that government would open a retail establishment in this country, for the purpose of selling guano to individual farmers at forty-six dollars per ton; when they can sell it by the cargo at the same price, without incurring any such expense. They, therefore, employ agents, who employ sub-agents, with capital sufficient to transact the business upon the wholesale principle. Now, does any one suppose that the capitalist employed as a sub-agent, will retail guano to farmers or any one else at an advance of about ten per cent. on first cost, when he can sell it to the speculator at the same price by the cargo, and without ever handling it at all, or even seeing it? Now, when the thing gets into the hands of the retail speculators, we may take it for granted the Philistines are upon us, and will extort as heavy a tribute as we are able to pay; but we have the weapons of our

defence in our own hands, and if we do not use them effectively, we have no body to blame but ourselves.

In the leading article of the last number of the Planter, on the subject of guano, your correspondent, speaking of the disadvantages and burdens under which the great producing class labors, says: "No other class of men would submit to such impositions, and I trust that our agricultural societies, which are multiplying in all parts of the country, will bring about such combinations of interests as to make the sting of the crushed worm felt in more ways than one." And, in your editorial on the same subject, you ask, "Why cannot farmers strike for lower prices, as mechanics strike for higher wages—are they inferior to them in spirit, enterprise, intelligence or power to combine?" In my humble opinion, the above extracts contain hints, which, if taken up and acted upon by the combined agricultural interest, the evils so justly complained of, would soon be removed. It is utterly impossible for any individual to contend successfully with the powerful antagonism which is at war with the interests of the producing class. We never can succeed upon the "every man for himself" principle; and we ought not, for it is too mean a principle to be admitted as a motive of human action. We need an efficient agricultural organization, by which, we can concentrate the power we possess upon any object or enterprise, calculated to protect or advance the interests of the producing class. Apply this principle of action to the guano monopoly, or any other, and it would be put down at once. In order to accomplish this most desirable object, I propose that a committee be appointed at the meeting of the State Agricultural Society, in November, for the purpose of forming a plan for the establishment of an agricultural depot in the city of Richmond, on the joint stock principle, with a capital sufficient to purchase guano by the cargo, direct from the Peruvian agents, at the government price; and, also, to keep a full supply of mineral manures, grass seeds, &c. that are known to be valuable improvers. When such plan is made out and the amount of capital to be raised ascertained, let the Society appoint as many agents as may be necessary to get the amount subscribed. Such an establishment would be the property of the farmers themselves, and the heavy profits now paid to sub-agents and speculators would be retained in our own possession, to accumulate and increase continually the means necessary for our improvement, physically, socially and intellectually. Now, this would be a small thing for the farmers of Virginia to accomplish, and only one of the things we ought to do to protect our interests and improve our condition. But, if we cannot do this thing, or something similar to protect ourselves, let us hereafter when we are down-trodden and oppressed, utter no plaintive murmur of discontent; let us cherish the vermin that batten upon our life blood—it

will be more dignified to suffer in sullen silence, and like the dumb ass, trudge on under our burdens without one word, in sorrow or in anger.

A SUBSCRIBER.

October 14th, 1853.

"SCIENTIFIC FARMING."

LETTER FROM BROOMSEdge.

"The possession of the raw material for making cotton is the starting point with the planter, and he can not create this from nothing. Cheap guano would help him amazingly, but this fertilizer is not cheap, and we fear it never will be; for a manure 18,000 miles from the fields where it is to be used, is altogether too far off to be very cheap."—*Dr. Lee.*

It is a very easy matter for a scientific agriculturist to glance over the analysis of a soil, and furnish the application of the missing constituents—but it may not often be convenient, or prudent, for the planter to follow the advice. It may do very well for market gardeners—for farmers who cultivate land worth from one hundred dollars to two hundred dollars per acre, in the neighborhood of large cities, who enjoy all the advantages of a constant and ready market, rapid and cheap transportation of products and manures to and fro, and who can tell to a dime the profit of every transaction—to employ guano, bone dust, and all the nostrums now so much in vogue; but it is little short of sheer nonsense to talk to one cultivating a staple subject to as many disasters, and liable to as many fluctuations in value as cotton, about using your super-phosphates, sulphates, *et cetera.*

Let us not be misunderstood. We are not disposed to poke fun at the scientific gentry, or to underrate the value of any of the inorganic manures so much dwelt upon. We belong to that unfortunate class, book farmers, and have received and enjoyed the ridicule of our neighbors for our "scientific notions," long enough to be allowed to "claim as large a charter as the wind, to blow on whom we please."

Let us take a case in point: A farmer applies to an agricultural chemist to prescribe the missing constituents of his soil, according to analysis. He is told to make a compost per acre, say ten cords muck; well, where is he to get the muck? There are thousands of farms where muck and pond mud are as scarce as guano. "Well, then, take leaves from the wood." "Why,

my dear sir, that's the very thing I hav'n't got." "Decomposed peat, then." "Peat," says the farmer, "never heard of it; new thing, sir." "Head lands, then." "Worse and worse, sir! you're into me again." "Charcoal dust, then." "Whe-w! all the coal dust in this neighborhood I could haul in a day, in a wheelbarrow!"

But let us admit by some hook or crook, the farmer "robs Peter to pay Paul," and gets together a few cords of leaves, trash, &c. "What next?" "Add five bushels salt and lime mixture to the cord." "That is worth, in our diggings, fifty cents per bushel—but here goes. What next?" "Now add two hundred lbs. bone dust." "Any more?" "Yes, three hundred lbs. guano, and—" "Stop," says the farmer, "let's begin to count up before we go any further,

"1. Leaves, time and labor, nothing—all done at home.	
2. 5 bush. salt and lime mixture, 50 c.	\$2 50
3. 200 lbs. bone dust, freight, &c.	4 00
4. 300 lbs. guano, 2½c; freight, \$1,	10 50
	<hr/> \$17 00

"Seventeen dollars gone—and all the missing qualities not yet applied! I never can stand it," says the planter. "Why, sir, I can buy plenty of fresh land in Florida, Texas, Alabama, Arkansas and Mississippi, for half the money, that will make twice as much cotton per acre, for twenty years." "But, my dear sir," says the chemist, "you are only making a profitable investment." There's the rub! The main difficulty is, to induce the planter to discriminate between an investment and an expenditure. The fact that he is repaid for the amount invested in manures, by an increase of product and improvement of soil, escapes him—because his mind is engrossed with the idea that he is paying out more per acre than new land would cost him. Dr. LEE has had the good sense to see this, and to mark out, to our mind, the only course by which we can escape desolation.

We must diversify our pursuits. Instead of leaving our cotton fields bare, exposed to the sun and the bleaching rains of winter, sow them down at the last ploughing in barley or wheat. During the winter you will have a fine pasture for hogs, sheep, colts, and such small stock as will not injure your land by treading. Thus, the corn crib will be saved; and you will have bacon to sell, mutton to eat, and wool for domestic purposes. If you have any wet

spots, sow grass upon, and convert them into pastures or meadows.

And if you *will* make more money than you need, do seek some other investment than new land, and new negroes and mules to wear it out. Instead of running crazy about every humbug cotton seed and manure, which is to increase the crop and diminish your profits, get a little cracked upon what will save your lands from waste, your pockets from being picked for ploughs, hoes, rakes, shovels, axes, buckets, tubs, shoes, blankets, linseys, hats, flour, corn, hay, cheese, bacon, horses, mules, and a thousand other things, which, when put together, bear heavily upon our prosperity.—*Southern Cultivator*.

THE USE OF SALT IN AGRICULTURE

A lecture on the agricultural employment of common salt was lately delivered before the Weekly Council of the Royal Agricultural Society of England, by Professor Way, which elicited the following interesting observations from Professor Simonds and other members of the Society:

Professor Simonds said that "he was not then prepared to enter fully on the subject; but he might remark, as a general rule, that although different conclusions had been drawn from the use of salt, according to the amount, and under the circumstances it had been supplied, it was exceedingly beneficial in moderate quantities, but prejudicial in large ones, as a condiment for the food of animals. He was aware that it had been considered by some persons to be injurious in producing abortion in ewes and cows. His experience, however, had not led him to such an opinion; for even when large quantities of salt had been given to animals, he had not found that it exerted any specific action on the uterine system, such as that which the ergot of many grasses was so well known to exert both violently and deleteriously on those organs. He thought undue quantity of food and plethora the more probable cause of abortion. It was difficult to fix the limit in which salt should be given to animals. Professor Way had placed in his hands a tabular statement of the amount of common salt contained in various kinds of herbage, from which he had been enabled to estimate the amount of that substance constantly taken into the stomachs of grazing cattle along with their ordinary food. He showed that cart horses, feeding on meadow hay, bean meal, and bran, took in a considerable daily proportion of salt; that in other cases, the hay was salted; and that the free use of rock salt was common on a farm; while the animals thus receiving these supplies of salt were not only uninjured by its use, but absolutely benefited

in their health, gaining vigor and strength. Sheep fed on clover hay and turnips would not receive so large a proportion of saline matter, and might, therefore, have more salt given to them in addition to their food. Horses might take with advantage from an ounce and a half to two ounces of salt daily; but an excess of it, no doubt, would render animals weak, debilitated and unfit for exertion. Similar facts were applicable also to oxen, which accumulated flesh faster by the judicious use of salt than without it. Arthur Young, in his examination before a committee of the House of Commons, in 1818, had stated that he found salt to prevent the rot in sheep; and Sir John Sinclair and many others had given evidence to the same effect.

Professor Simonds then alluded to the solubility of common salt and its passage into the stomach and intestinal canal, its absorption into the system by the veins, its action on the liver, and the supply of soda it yielded to the bile; thus leading to a greater amount of nutriment being derived from the food. Sheep, living on pastures giving them the rot, were found to recover when they had access to salt; and he thought the probable cause of sheep not rotting on salt marshes, and recovering when put on them, was the healthy stimulus thus communicated by the salt to the liver of the animals, by which that organ was guarded from disease, and its functions invigorated. Salt, too, was well known as a vermifuge, destroying many kinds of worms in the intestines of animals, and conferring a healthy tone of action which prevented their re-occurrence. He then alluded to the prophylactic or preservative influence of saline impregnation against marsh exhalations, and its power of destroying the poison of those miasmata, as shown by Dr. Stevens, in his work on the blood, where reference is made to the fact, that, at Salina, in Genesee county, near Oneida Lake, New York, all the individuals in and about some salt works, situate in the midst of a marshy district, escaped from the attacks of marsh fever, while the population around them suffered.

Colonel Challoner's attention was called to the value of salt about fifteen years ago, by the late Earl Spencer; and since that time, he had invariably used it for his cattle, which, in consequence, had attained to a better condition of flesh than they had done when no salt was given them. His Devons were the best cattle on his farm, and they consumed the largest quantity of that substance.

Mr. Fisher Hobbs had little more to state on that occasion than he had stated when the subject was discussed by the Council a few months previously. He agreed with Colonel Challoner, that those of his animals which had the most salt did best, and even pined after it when it was withheld from them. He did not consider that it acted simply as a manure on grain crops; but it stiffened and brightened the straw, and caused it to ripen from

two to five days earlier than it otherwise had done. In the case of root crops, it was more beneficial to mangold wurtzel than to turnips; and, in fact, that great caution was required in its application to the turnip plant, which was easily injured by injudicious use, on account of its great effect on the vitality of that plant. It increased the size of the mangold bulbs, and caused the plant to retain its fertilizing character during dry seasons. He applied the Pilchard fishery salt broadcast on each side of the plants, in July, either alone, (in particular seasons,) or mixed with ashes or guano, (which improved it,) and then scarifying it. The frost had less effect on the salted than on the unsalted portions of his land; and by its means, light soil becomes more retentive of moisture, and more adherent and compact in its character. His land was variable, consisting principally of sand, gravel and mixed soil. The fishery salt he employed was nearly of the same price as the ordinary salt of commerce, and it contained oil and animal matter derived from the fish. The wire worm died in it. In conclusion, he considered salt to be very beneficial to the soil, either alone or in a state of mixture with other substances.

The Rev. A. Huxtable was rather for leaving off salt. Those of his sheep which had the most of that substance were the least improved in their weight; in fact, one ewe, very fond of salt, had become a mere skeleton from taking it in excess. He found that his animals were much purged by the use of salt. His milch cows, however, requiring more flesh than fat, were much benefited by it. Roots were much used by him, and he continued the use of salt with great effect as a manure for their growth; indeed, in this respect, he could not do without it, especially in the case of his mangolds and carrots, for the latter of which, being a sweet root, of which all insects were fond, it acted as a shield against depredation for these crops. He drilled it in with ashes and urine. He mixed a saturated solution of salt with dissolved bones, and found it produced a more pasty and decomposed substance. His soils were gravel, clay, and chalk.

Mr. Fisher Hobbs thought it probable that the circumstance of Mr. Huxtable's sheep being shut up when the salt was given to them, was the cause of their purging; for he had known it to be the common practice in Leicestershire some years ago, when the sheep had a purging upon them, to get them into a fold, and give each of them half a handful of salt as soon as the diarrhoea made its appearance. This practice he had himself usually adopted with success, and he believed it to be common amongst flock masters.

Hon. R. H. Clive, the Chairman, when travelling abroad, had noticed in the middle of hotel yards, where relays took place, a large block of salt, to which the post horses had free access. He considered that horses in full work derived an advantage, more or less, according to circumstances, from this substance.

With regard to its effects on vegetation, a curious result had occurred in Cheshire, where the Marquis of Westminster had applied salt liberally on a road four miles long, for the purpose of destroying the weeds on it; but it was found that the weeds, instead of being destroyed by this application, were more numerous than ever.

Mr. Barrow had found salt improve the strength and quality of his wheat straw, his neighbor's crops having been laid while his stood well. He had entirely destroyed fine rows of box in his garden by applying salt on his garden walks for the purpose of killing the weeds.

Mr. Parkins had not had a weed on his gravel walks for five years, by forming them on a bed or substratum of chalk mixed with coal gas tar sifted over gravel, and allowed to set; lime being used when a more compact substratum, (capable of bearing the pressure of a loaded cart wheel without yielding,) was required.

Mr. Mechi had used 150 tons of salt on 170 acres of land during five years' occupation. He found it essentially necessary for cattle and horses, when fed on wheat straw cut into chaff with bean meal. If salt were not given, their coats appeared rough and unhealthy; but with salt, they were sleek and healthy. His sheep and pigs also had salt. Horses and cattle received two ounces daily, yearling calves one ounce. Without being able to give the scientific reason, salt gave strength and brightness to the wheat straw, and prevented its lodging. He applied it at the rate of 300 pounds per acre, mixed with the same weight of guano. He also used a large quantity under the animals, to fix the ammonia in their manure, which it did far more effectually than gypsum. He had known of great advantage from mixing it in the dunghill. It was very beneficial to mangold wurtzel. It certainly, with all deference to Mr. Way, appeared to render the land more wet and adhesive. He thought it would not be so beneficial on undrained heavy lands. Early on a hot summer's morning, he had observed the grains of salt formed a wet spot, as though they had attracted moisture from the dews.

Professor Way explained that common salt might be a better fixer of ammonia than gypsum, on account of its greater solubility. Salt, from any deliquescence it occasioned, might affect land in regard to color and resistance to the action of frost; but moisture was not the simple cause of the good effects of salt.

Mr. Dyer instanced the deliquescent effect of salt in bacon-salting rooms, where the pavement was constantly damp. He had even known milk spilt on deal boards years ago, which now, in damp weather, always attracted moisture where the milk had been originally absorbed.

Mr. Fisher Hobbs referred to the power of the fishery salt to fix ammonia, and used it

frequently with guano with a view to that object.

Baron Mertens expressed to the Council his thanks for the kind manner in which they had acceded to his request, on the part of the Belgian government, that this subject should receive their attention, and give rise to practical discussion. He would only further trespass on their time by inquiring whether any experiments had been made to ascertain the increase in the weight of milch cows, and of the milk they yielded, in consequence of the use of salt as part of their food.

The Rev. A. Huxtable, having a dairy of forty milch cows, had found it difficult to make experiments on that express point; but Bousingault had last year given an account of experiments similar in their object to those which were now the subject of Baron Merten's inquiry.

THE HON. WILLOUGHBY NEWTON.

We are gratified to learn that the services of this distinguished agriculturist and eloquent gentleman have been secured by the Rappahannock River Agricultural Society, and that he will deliver an address at their first Fair and Cattle Show, to be held in Port Royal on the 10th of November. A letter to us from Col. Tayloe, President of the organization, says: "We have also the expectation of the presence, on the interesting occasion, of Mr. Ruffin, to aid and cheer us on in the great cause of agriculture."

The progress of the Port Royal Society is such as must be highly gratifying to every well wisher of the great interest of which it is the representative. Enrolments into its membership are daily being made, and it bids fair to embrace a large landed interest, from the owners of which may be gathered much that is valuable in theory and practice.

The Agent, Mr. Kidd, has just gone to Westmoreland, having secured already, in other quarters, \$750, which is to be devoted to the encouragement of the various branches of the several industrial pursuits—agricultural and mechanical—in the way of premiums.

We trust that old Westmoreland, and the counties yet to be visited, will respond in a liberal spirit to the call that is just made. Tidewater Virginia has the elements for such an organization, and all that was necessary to set the ball in motion, was the coöperation of two or three of the intrepid spirits whose broad acres are to be found in Caroline.

Again, we say, all honor and credit to the enterprising spirit which dictated the organization, and no less to the zealous and untiring efforts of the few who are nursing it to a full fruition.—*Fredericksburg Herald.*

RAPPAHANNOCK RIVER AGRICULTURAL SOCIETY.—We learn that this Society is making encouraging progress. Under the active agen-

cy of Mr. Kidd, many members have enroled themselves, and over six hundred dollars obtained in the counties of Caroline, Essex, King George and Spottsylvania. Essex has responded nobly to the call made upon its spirit and patriotism. It is to be hoped that the other counties upon the river will do as well, and that the Society will enlist many hundred members. The desire is universal for a union with the Society organized recently at Fredericksburg. Three or four places have been named as suitable for the holding of the Annual Meetings of the Society. The first will be held at Port Royal, on the 10th of November next. At that meeting, the members will select the next place and will respond to the invitation of the Fredericksburg Society.

At the last Court in King George, Mr. Corbin addressed the people, and urged them to coöperate in the efforts made to promote the cause of agriculture. His address was well received, and of the small number present, a good proportion enroled themselves members. Had every county a farmer so energetic, patriotic and liberal, the Rappahannock River Agricultural Society would teem with active friends.—*Fredericksburg Herald*.

Agricultural Societies have already done and still are doing much to promote improvements in agricultural affairs, and increase the products of the soil. Through their influence mainly, wonders have been wrought in the Eastern part of the State. Lands which long ago were thrown out as wholly unproductive and not worth cultivation, have been reclaimed and are now yielding crops which astonish every body who sees them. Our Valley farmers think they have been making rapid improvements in agriculture, and so they have; but the improvement made in the tidewater district, within the last ten years, far exceeds that made in the Valley. This may seem strange to our farmers, but still it is true. The tidewater farmers have had many difficulties to overcome; still, by well directed efforts—by conferring one with another in hole and corner clubs, and agricultural societies—by a happy union of theory and practice—of science and labor, they have to a great extent succeeded in making theirs the most productive section of the State.

If such splendid results follow such efforts elsewhere, why should we not also put them forth? Why should we disdain to use means which have been so productive of good to others? We may consider ourselves very good farmers, but certainly there is still great room for improvement. Perfection is hard to attain, however great may be our strivings after it.

The Fair of the Virginia State Society will be held in Richmond, in November next. The city has taken great interest in it, and besides providing a suitable lot of ground for the purposes of the exhibition, has appropriated six thousand dollars towards defraying ex-

penses. Gen. Richardson, the intelligent and gentlemanly Agent of the Society, is now making a tour of the State, awakening a general interest, and making such arrangements as will insure such an exhibition of the products and industry of the State, as will redound to its honor.

We have no doubt that the Fair will far exceed any thing of the kind ever before held in Virginia, and be every way worthy the attention of all who desire improvement in that most noble of all pursuits—the cultivation of the soil. We are very anxious that the farmers of Rockingham shall be represented at the Fair. They can make an exhibit of industry equal to any other county in the State—one that will do themselves and their county great credit. Shall it be so? We should be glad to hear from some of our farmers upon the subject.

We suggest that a meeting be held for the purpose of organizing a County Agricultural Society, and making arrangements for the exhibition, of some of our county products at the State Fair. Farmers, fix the time and place and hold the meeting. Speak out!—*Rockingham Register*.

From the Farmer's Companion.

FALL MANURING TO PAY FOR ITSELF.

We wish to recommend to our Western farmers, especially those upon the higher classes of soils, a new system of agriculture, which we are convinced cannot but produce great, lasting and profitable benefit, if fully carried out. That in many respects our Western soils do, and our Western farming must differ from those of the East, we already begin to learn. We came to the West totally ignorant of the circumstances that surrounded us; and had to gain experience by a slow and often expensive accumulation of facts. So far as Michigan is concerned, we may lay down the following as truths that are now distinctly ascertained: 1. That our best wheat lands will not stand many successive crops without deteriorating in value; 2. That under very few circumstances is the yield of grain as large as it should be; nor is it, one year with another, truly profitable; 3. But clover, as affording pasturage to sheep, and, when ploughed in, a certain quantity of organic and inorganic manures, keeps the land up to its original fertility, and in some instances temporarily improves it; 4. Therefore, to grow grain profitably without immediately injuring our farms, it is quite necessary to combine sheep farming and clover growing with wheat raising;

5. Sheep farming is, in itself, extremely lucrative, and is likely to continue so for a long course of years; 6. But to the *present system* of wool and clover growing there are serious practical objections, which we believe may, to a great extent, be obviated by the following plan. These objections are, that clover seed is expensive, and apt to fail in giving a good crop. That it requires plaster, itself expensive, to be added to it. That it must be some time in the ground to produce its effect. That it is impossible, under ordinary circumstances, to keep sheep or other stock in robust health, on *dry food* during our long winters; that we have generally to turn them to pasture before the grasses are fit to afford nourishment; and thereby not only are our pastures injured, but our wool is altered in its character, smaller in quantity, and the lambs less apt to be healthy and vigorous. In no country in the world has there been greater improvement in stock, nor is stock *habitually* larger and finer, than in Great Britain, and a very essential reason for this—undoubtedly the principal one—is the rich *green food* supplied, with an unlimited quantity of turnips and other roots. We believe it to be a physical *impossibility* to improve stock, or keep up that which is imported to its perfection, without *green food* in winter. It was not till improved grasses and turnips were introduced into England, that any improved stock was heard of, and the one has kept equal pace with the other; while, it is believed, that without exception, imported stock always degenerate with us in the second or third generation. The conclusion of these facts is obvious enough. Again, clover is a late plant in the spring, growing hard and woolly early; while it is never safe to depend upon only one standard crop.

There are many other reasons, that every practical man knows, for wishing for some other crop which will serve as green food, and to plough in as manure at the same time, without going to the expense of raising roots. Now the crop is rye. Many men grow rye, but not according to this system. The plan we propose—a *plan habitually carried out year after year*—is to plough, as early in fall as convenient, the land intended for spring crops the next season, and to sow rye heavily, twice as heavily as if intended to seed. By frost there will be a fine growth of rich fodder, and the sheep may then be turned upon it whenever there is no snow; or, what is preferable, for three or four hours in the

middle of each day, being fed at the barn with dry food morning and evening. Or this rye may be kept for early spring food when the stock begin to tire of hay. In most seasons, as in this last, there are two or three weeks in spring when sheep will *not* eat hay, and there is no grass for them; and the ewe, large with lamb, wanting the richest nourishment, is seriously injured by this forced abstinence; the vessels that should secrete milk, shrink up; and the young lamb either dies of starvation, or is stunted and unhealthy throughout life.—Thousands of lambs are annually lost in the North Western States from this cause. Then, when time to plough for spring crops comes, *plough in the rye*, with all the manure the sheep have left on the field; and you cannot fail to have a much larger spring crop. Compare this with the common system. A crop of wheat is taken off, and the weeds and wild grass eaten up rapidly, doing little good. For eight months the field lies bare, paying no interest, baking in the sun, and all the valuable gases escaping. When spring comes, the soil is hard, exhausted; or, if you *do* manure, it is by hauling at considerable expense from your yard, and the consequence is only an average crop at the most. By this new system, you make your field, during winter, grow wool and meat—paying good interest; you manure it richly at no cost; you find it light and friable in the spring; the decaying rye, ploughed in, rapidly starts the spring crop, and, supplying moisture, sets dry weather at defiance; and you greatly increase your grain and straw. There have been instances where utterly barren Virginia farms have been brought to a high state of production by a few years' perseverance in this plan. It is putting much into the land and taking little out; so that each year there is a larger accumulation of soluble manures laid up in the soil.

From the Rural New Yorker.

CONCRETE CELLAR BOTTOMS.

The facility and cheapness with which the bottoms of cellars may be made clean, sweet and impervious to water, is generally but little known to house owners,—nor the ease and certainty with which water may be excluded from cellars where it is difficult to drain.

In soft and pervious soils, this process is

best performed by paving with small stones laid in sand; but in common compact soils, the natural surface, well leveled, will answer all purposes. Make a thin mortar with water lime and coarse sand, of the consistency called *grout*, or so thick that it can be poured from a pail on the ground. Commence with a portion of about eight or ten feet at one end, and throw on sufficient to cover it an inch or more thick, and with a scraper, or rake-head, spread it evenly and smooth; then throw on as much clean, coarse gravel as it will absorb, and so continue until it is finished. In twelve hours, or as soon as it has *set*, sweep the overplus gravel evenly over the surface and tamp it down with a short plank and a pounder, until it is smooth and compact, and in a few days of good weather it will become like a solid rock. It assists its durability and firmness, to give it several good dashes of water after it is dry.

To render the sides impervious to water, where drainage is difficult or costly, requires that the wall should be laid with mortar originally: and at the time of constructing the bottom, a good, well proportioned water lime mortar should be plastered on a little higher than the source of water, and well and firmly slicked down when about half dry, and followed by another coat of the same—when, if a proper time intervenes before there is any outward pressure of water, it becomes tight as a barrel or tub, is always sweet, clean and cool, and no vermin can enter or find lodgment.

The sand used in the grout and mortar should be coarse, clean and sharp, and the gravel from the size of walnuts down to coarse sand.

From the Cotton Planter.

WATER GATE AND WATER FENCE.

DR. N. B. CLOUD: *Dear Sir*,—Yesterday I received your valuable work, gotten up in much better style, and filled with much more useful and interesting matter than I believed it possible for a monthly, at one dollar per year. But God speed your work, and may it prove for us what the American Farmer has done for Maryland and Virginia. I see in your first number, you invite contributions from the whole planting States, and as I believe as much information is to be derived from the practical farmer as from the theorist, who can write articles on farming, or constitu-

tions, if need be, by the gross, I have determined, although a manager, to contribute my mite for the advancement of an interest, and consequently a people with whom I have been reared, and with whom I intend to be buried.

I propose to give to the farming world a water fence that water cannot move, and a water gate that is undisturbed by freshets. I will denominate the fence as a picket fence. First, then, cut and maul some white oak rails, ten and a half feet long, of good size; cut a ditch three feet deep, as narrow as will allow your men, or ditchers, to stand up in it, then put your rails in the ditch, and incline them against the post of the water gate, about an angle of forty-five degrees, commencing with a rail not more than twelve inches long above the ground; over that rail drive two stakes with a maul on each side, that have first been well sharpened, until they refuse to go, or until you have driven them within one foot of the rail; then put another rail between the stakes, observing to keep the foot at about the same distance from the first rail throughout the whole length.—Again, repeat the staking operation, dropping back about one foot, and so on, until you reach the height of four feet (this I believe to be the true height) as the fence is so rugged nothing will undertake it, and the lower the better, so as to allow logs, trash, &c. to pass over during a freshet. After your fence is completed to high water mark, have the ditch filled up with rock, if they can be had, in which your rails are put, and have them well rammed. This will make a fence that water cannot move, or the weight of water; but strengthen it. And to move one rail you have to move the weight of the whole fence.

The water gate is somewhat difficult to describe. My gate is fifty-two feet wide, the post twenty-four feet long, fourteen inches square, and set in the ground six feet, with braces from the top of the post, stretching back at an angle of forty-seven degrees, and six feet in the ground, rammed with rock; then plank are pinned on the post and braced so as to prevent the least giving way. Great care must be taken to hang the gate four feet higher than high water mark, so as to admit logs of the largest size to pass under with impunity, and to prevent any hanging, and to make doubly sure, the gate will raise by the force of water, it must be planked on the but or upper side, with three-quarter inch plank, very close.

I have shown you the best representation I can, of the fence and gate, which you will find enclosed, and I have only to add, I have seen trees of the largest size, roots and all, pass under this gate, and any quantity of logs, trash, &c. pass over the fence. I hope, sir, your readers will be able to understand my description of the gate and fence, and they may receive as much benefit from it as I have.

W. P. G.

THE CRYSANTHEMUM.

This old esteemed favorite of the flower garden has long been cultivated, and cheered the heart of many a lover of flowers by its beauty—prized for its appearance at a season when most flowers decay, it lights pale October on his way—and with its departure we glide into winter. It was first introduced into England about 1754, but it was not until 1789 that the choice varieties were brought from China to Marseilles, and the next year imported into England from France. At different periods there has been introduced many new varieties, until they now include various colors of rose, buff, golden quilled, sulphur yellow, Spanish brown, white, and by crossing they have been produced in great variety, some of them finely tinged with white and pink are peculiarly beautiful. The lilacs and purples are of great variety of appearance, with florets either perfectly quilled, expanded and long, or short, so as to form a globose flower. While these have been propagated to a great extent, it was not until the introduction of the *Pomponne crysanthemum*, or Chusan daisy, from China, by Mr. Fortune, some five years ago, that quite a new impulse to the culture of this flower has been given, and completely re-established its claims to popular favor, and even the richest dahlia can scarcely boast of a greater popularity than do these modest, charming daisy crysanthemums. They are certainly a great improvement on the old large flowered Indian varieties. The plants are so compact in their growth, so profuse in their blossoms, the flowers are so regular and the colors so varied, the foliage thick and the entire plant and its flower so miniature-like that they strike the eye at once by their novelty and beauty. They are so easily propagated and grown, that we may expect that every garden will include them among their autumnal ornaments.

They are readily struck from cuttings in a sandy soil, and by division of the roots in January or February, when every portion with a stem will make a fine plant if space is given for them to admit light freely around them. The pomponne varieties are admirably adapted to cultivation in pots, and in the early winter months furnish a beautiful ornament for the

parlor window. The only care necessary, when the plants have been properly potted and established, is to give them light and air, and a regular supply of water; with this attention they will bloom freely until Christmas. In the open garden they require a rich, moist soil. The great requisites in the soil for crysanthemums is moisture in summer and moderate dryness in winter. The drought of summer seems to weaken them and, of course, injures their blooming in autumn.

The new pomponne varieties embrace the various colors—blush crimson, dark crimson, pink, rose, lilac, orange, yellow and orange, straw, white, creamy white. Some of the varieties are beautifully tipped, and all are of the most perfect form and of rich and varied colors.—*Southern Agriculturist*.

PAYMENTS TO THE SOUTHERN PLANTER.

From 26th September to 1st November, 1853.

All persons who have made payments early enough to be entered, and whose names do not appear in the following receipt list, are requested to give immediate notice of the omission, in order that the correction may be made in the next issue:	
Geo. F. Davidson to September 1854	\$1 00
William F. Plunkett to July 1853	} 5 00
E. K. Durrett to September 1854	
P. C. Durrett to September 1854	
N. E. Early to September 1854	
James M'Mullan to September 1854	
William T. Simms to September 1854	} 1 00
Dr. E. Watson to September 1854	
Henry T. Watkins to October 1854	1 00
Col. B. H. Barnes to July 1854	1 00
Dr. J. E. Craig to September 1854	1 00
John A. Burwell to September 1854	1 00
Edward L. Travis to January 1855	1 00
James Birdsong to September 1854	1 00
Maj. H. D. Thrower to September 1854	1 00
James A. Smith to January 1854	1 00
J. A. Elliott to January 1854	1 00
John F. Whitfield to January 1854	1 00
Harrison Jones to January 1855	2 00
James Brown to July 1854	2 00
P. M. Edmondston to October 1854	1 00
Dr. John D. Spraggins to January 1854	2 00
Wm. A. Jones to January 1854	1 00
James G. Woodson to January 1854	1 00
Charles A. Fore to January 1854	1 00
Hon. Wm. C. Rives to September 1854	1 00
W. H. Hughart to January 1854	1 00
Wm. Walton to July 1854	1 00
John R. Miller to January 1855	1 00
H. Harrison to July 1854	1 00
Joseph N. Goodman to April 1854	1 00
Robert B. Payne to September 1853	2 00
N. C. Clarkson to September 1854	1 00
David La Prade to October 1854	1 00
P. B. Jones to July 1854	1 00
Wm. M. Branch to May 1854	1 00
E. D. Hundley to April 1854	1 00
Estate of B. C. Chinn (in full)	1 75

H. F. Yager to July 1854	\$1 00	Col. Thomas Pugh to January 1854	\$1 00
A. B. Anderson to September 1854	1 00	Capt. J. W. Armistead to January 1854	1 00
John Johnson to September 1854	2 00	Thomas B. Martin to January 1854	1 00
B. Kent, Sr. to June 1854	1 00	Dr. J. E. Nicholson to January 1855	2 00
James E. Woltze to October 1854	1 00	Wm. Y. C. White to January 1854	5 00
James S. Walrond to January 1855	1 00	Wm. F. Bentley to September 1854	1 00
Henry R. Cook to March 1854	1 00	Nathaniel Walton to September 1854	1 00
Jesse Barnes to September 1854	1 00	John N. Griffin to September 1854	1 00
F. N. Watkins to January 1854	1 00	John P. Roberts to January 1854	1 00
Wm. T. Mordecai to September 1854	1 00	Thomas Bruce to January 1854	3 00
Henry A. Winfree to January 1855	2 00	T. Shumate to December 1853	1 50
T. W. Chapman to July 1854	1 00	John Smith to July 1854	1 00
Wm. H. Clore to July 1854	1 00	Henry J. Venable to January 1854	3 00
P. C. Lauck to September 1854	1 00	James V. Kirkpatrick to October 1854	1 00
Daniel Stickley to July 1854	1 00	James Lindsay to January 1854	1 00
Robert V. Lockhart to July 1854	1 00	Dr. Wm. H. Macon to September 1854	1 00
Chas. D. Castleman to July 1854	1 00	Dr. M. M. Harrison to July 1854	1 00
John Montgomery (in fall)	1 50	Richard A. Tiller to September 1854	1 00
John W. Burgess to July 1854	1 00	Thomas Patterson to September 1854	1 00
John T. Magill to July 1854	1 00	R. R. Barton to January 1855	2 00
John W. Patterson to September 1854	1 00	T. R. Blandy to September 1854	1 00
Col. Lloyd Noland to September 1852	1 00	R. M. Williams to September 1854	1 00
G. W. Peter to July 1854	1 00	D. A. Smith to September 1854	1 00
George Risler to July 1854	1 00	R. F. Omohundro to September 1854	1 00
Wm. M. Kablinger to October 1854	1 00	James Phillips to November 1854	1 00
Wm. S. Carter to January 1854	1 00	J. C. Phillips to November 1854	1 00
Jos. W. Campbell to July 1852	1 00	George M. Bates to November 1854	1 00
Edmund Thurman to January 1854	1 00	Wm. Caussey to November 1854	1 00
Wm. T. McCarthy to October 1854	1 00	Wm. Ivey to November 1854	1 00
Albert E. Kennedy to July 1854	1 00	Jefferson Sinclair to November 1854	1 00
George Rives to July 1854	1 00	Nathaniel Gammel to November 1854	1 00
John Selater to January 1855	3 00	Wm. Phillips to November 1854	1 00
Daniel E. Hickman to January 1855	1 00	C. K. Mallory to November 1854	1 00
Dr. John R. Baylor to October 1854	1 00	Fayette Jones to November 1854	1 00
Edward J. Thompson to January 1854	1 00	Wm. Arnold to November 1854	1 00
Col. D. R. Goodman to September 1854	1 00	Sylvester Kelly to November 1854	1 00
Dr. E. F. Birchhead to July 1854	1 00	Wm. P. Brittingham to November 1854	1 00
Octavius G. Michie to October 1854	1 00	John Tabb, Sr. to November 1854	1 00
Gideon H. Timberlake to January 1854	1 00	E. E. Savage to November 1854	1 00
Capt. A. M. Appling to July 1854	2 00	G. B. Jones to November 1854	1 00
George A. Sinclair to October 1854	1 00	S. W. Outten to November 1854	1 00
Lewis C. McGehee to July 1854	1 00	Wm. Latimer to November 1854	1 00
J. R. Vest to July 1854	1 00	Parker West to November 1854	1 00
R. W. N. Noland to July 1855	2 00	John P. Topping to November 1854	1 00
David Byars to September 1853	1 00	Thomas Fitzgerald to January 1855	3 00
Dr. T. J. Garden to January 1855	1 00	Dr. R. A. Patterson to November 1854	1 00
J. B. Bragg to September 1854	1 00	Capt. B. Carper to January 1854	6 00
George Rives to January 1854	1 00	Daniel Ammen to January 1854	1 00
C. H. Lewellen to January 1854	1 00	John S. Woodson to January 1853	1 00
Dr. D. M. Wilkinson to September 1854	1 00	Caleb Leigh to January 1854	1 00
C. S. Hutcheson to September 1854	1 00	Col. Lloyd Noland to September 1853	1 00
John Puryear to July 1854	1 00	Wm. B. Stanard to July 1854	1 00
Professor B. Puryear to January 1854	1 00	Robert F. Fox to July 1854	1 00
Matthias Lamb to June 1854	1 00	Edward Gilliam to September 1854	2 00
Pichegru Woolfolk to July 1854	1 00	Ryland Rodes to January 1855	3 00
Charles W. Statham to October 1854	1 00	Chas. A. Price to January 1855	3 00
Dr. Thomas H. Averett to July 1854	4 00	Wm. W. Redd to November 1854	1 00
James Barbour to July 1855	2 00	Edwin Smith to March 1854	1 00
C. N. Michie to January 1854	1 00	Josh. Miller to July 1854	1 00
Dr. E. P. Scott to January 1854	7 00	Jos. Riddick to January 1855	3 00
Joseph Rock to January 1855	2 00	Col. W. C. J. Rothrock to January 1852	5 00
John F. Greenlee to June 1854	1 00	Charles Smith to January 1855	3 00
Rev. J. R. Garlick to October 1854	1 00	Dr. R. C. Jones to January 1855	5 00
James E. Moseley to September 1854	1 00	George Hocker to January 1855	2 00
Jackson & Williamson to January 1854	1 00	George Chambers to September 1855	3 00
A. Bailey to January 1854	1 00	Benj. A. Donald to November 1854	1 00
C. A. Anderson to January 1855	2 00	A. B. Nichols to July 1854	2 00

NEW PLASTER AND BONE MILL.

THE subscriber offers for sale fine Ground and Calcined Plaster, both of the best and purest quality; he has also a Bone Mill attached, and intends to keep a supply of Ground Bones, fine and pure. Farmers and others are invited to call and examine for themselves. His prices shall be as low as the same quality articles can be bought for, North or South. The highest cash price will be paid for dry bones, delivered at his Mill adjoining the Paper Mill.

oc—tf

R. R. DUVAL.

DR. VALENTINE'S RECIPE FOR MAKING ARTIFICIAL GUANO.

No. 1. Dry Peat,*	- -	20 bushels
No. 2. Wood Ashes,	- -	3 bushels
No. 3. Fine Bone Dust,	- -	3 bushels
No. 4. Calcined Plaster,	- -	3 bushels
No. 5. Nitrate of Soda,	- -	40 pounds
No. 6. Sal Ammoniac,	- -	22 pounds
No. 7. Carb Ammonia,	- -	11 pounds
No. 8. Sulph: Sodæ,	- -	20 pounds
No. 9. Sulph: Magnesia,	- -	10 pounds
" 10. Common Salt,	- -	10 pounds

* If peat cannot be obtained, use garden mould, or clean virgin soil instead.

DIRECTIONS FOR MIXING.—Mix Nos. 1, 2, 3, together—mix Nos. 5, 6, 7, 8, 9, 10, in four or five pails of water, or enough to dissolve the ingredients. When dissolved, add the liquid to the mixture, (1, 2, 3,) and mix as in making mortar. When thoroughly mixed, add No. 4, (the calcined plaster,) which will absorb the liquid and bring the whole to a dry state. Mix under cover in a dry place—observe the proportions in making small or large quantities. The above receipt will make one ton, which will manure seven and a half acres of land.

Having furnished the above to a number of farmers who have tested its qualities—many thinking it equal to natural guano—the subscribers have made arrangements to furnish any quantity during this season, and will sell the ingredients exclusive of the Peat, Wood Ashes, Plaster and Salt, (articles on every farm,) at the low price of \$10 per ton. One sugar hoghead will hold ingredients enough for five tons. All orders will be carefully and promptly executed, and sent to any part of the State.

R. R. DUVAL & BRO.

Chemists and Druggists, corner above the American Hotel, Richmond, Va.

oc—tf

FOR SALE OR TRADE.

A FINE FARM, containing over 500 acres, lying in Hanover County, Virginia, and one for sale in Buckingham County, containing over 800 acres; also a number of the finest Cotswold Sheep, and the best lot of improved fowls in the United States.

Address (post paid)

MARTIN GOLDSBOROUGH,

AGENT.

Harrisonville, Baltimore Co., Md.

au—tf

SPLENDID FOWLS.

THE attention of poultry breeders and fanciers of poultry generally is invited to the unrivalled varieties now offered to the public by the subscriber, embracing every species of value in the United States. Especial care has been bestowed to render them all that can be desired by the poultry dealer, farmer or amateur.

Having devoted several years to the rearing of choice fowls, the subscriber flatters himself that by his unremitting care and attention those now offered by him have attained a degree of excellence, as regards size, symmetry, plumage, &c. which cannot be surpassed. The several breeds are warranted entirely pure, especial vigilance having been exercised to prevent any admixture of blood. Among these may be enumerated the following: Brahma Pootra, Chittagongs, Gray Shanghaes, Buff Shanghaes, Black Shanghaes, White Shanghaes, Red Shanghaes, White Cochins, China, Malays, Bucks County, White Surry Dorkings, Black Polands, White Polands, Game Fowls, Silver Pheasants, Seabright Bantams, English Bantams, White Bantams, Nankin Bantams, Royal Cochins, Hong Kongs, Great Javas, Black Spanish, Speckled Dorkings, Creoles, Frizzled Fowls, Golden Spangled Hamburgs.

Purchasers may buy with the fullest confidence that their orders will receive prompt attention, and that the fowls furnished are pure blooded and in healthy condition.

All fowls purchased will be carefully caged, and delivered in New York or Albany, or placed on shipboard or railway free of charge, after which the responsibility of the subscriber in reference to their safe arrival at their destination ceases.

J. W. PLATT, box 128 P. O.,

nov—11

Rhinebeck, N. Y.

HOLLYWOOD NURSERY.

JAMES GUEST, FLORIST AND NURSERYMAN, a few yards south-west of the new Public Square on which the Virginia State Agricultural Society holds its Annual Exhibition, Richmond, Virginia, has always on hand a large supply of Greenhouse Plants, Roses, Crape Myrtles, Magnolias, Evergreens, Shade and Ornamental Trees, Asparagus Roots (1 and 2 years old,) Grape Vines, Osage Orange for hedges, Strawberry Vines (some fine new varieties,) Lancashire Gooseberries (20 varieties,) Fastolf and other Raspberries, Rhubarb or Pie Plant of different kinds, &c. &c.

Orders received for Fruit Trees; in addition to which, he will shortly be in receipt of several hundred Plum and Pear Trees of the choicest varieties from one of the largest Northern Nurseries, selected with care.

Reference is made to the following gentlemen: Charles T. Wortham, James Fisher, Jr., R. M. Zimmerman, Esqrs., Richmond; James Lynch, Esq., Petersburg; Charles B. Shaw and Montgomery Lynch, Esqrs., Civil Engineers.

nov—21*

PREMIUM BEE PALACE.

THE following certificate, with other testimonials we have seen, show the profit there is in rearing the Bee. The newly patented improvement of Mr. Calvert is certainly a most valuable invention. The right may be purchased by States, Counties or Families by addressing Geo. Calvert, Upperville, Fauquier County, Va.

P. D. B.

Upperville, Fauquier, Va., Oct. 27, 1853.

We hereby certify, that we have observed, with much interest and astonishment, at different times during the past summer, the working of Mr. George Calvert's bees in his Improved Experimental Palace, and can say confidently that we have never known or witnessed so large a yield from any other kind of hive. Mr. Calvert has from one old colony not less than one hundred and fifty pounds of virgin honey, including the yield of the swarm which came off June 5th. The young colony made fully fifty pounds of nice virgin honey over a sufficient support for them during the winter. The entire yield from the five old hives, or colonies, kept by Mr. Calvert over winter, is fully five hundred pounds of virgin honey, free of bee bread or young bees.

WILLIAM R. GILL,
B. F. LINKINS,
WILLIAM HARDY.

ANALYSIS OF SOILS, &c.

THE undersigned is prepared to execute the analyses of Soils, Guano, Marls, Plaster, &c. &c. at the Laboratory of the Virginia Military Institute. Packages may be forwarded through Webb, Bacon & Co. Richmond, or Echols & Pryor, Lynchburg.

Persons desiring further information will please address

WILLIAM GILHAM,
Prof. Chem. and Agriculture, V. M. I.
Feb. 1, 1852. Lexington, Va.

CHOICE POULTRY.

THE subscriber offers for sale the following varieties of *pure blooded Fowls*, viz. COCHIN CHINA or CANTON FOWLS; BLACK, WHITE, BUFF and BROWN SHANGHAIS; CHITTAGONGS or GRAY SHANGHAIS.

The above are the largest and best variety of fowls bred in this country, and are from stock originally imported by the subscriber. Gentlemen, Poultry-keepers and others, desirous of procuring choice Poultry may depend upon the above stock being purely bred and warranted true to their name. Address

CHARLES SAMPSON,
West Roxbury, Mass.

The different varieties of these beautiful fowls may be seen at my residence on First Street, between Main and Cary Streets.

W. A. BUTTERS, 139 Main Street.
Richmond, Nov. 1, 1852—1y

FOR SALE.—A fine farm near Marysville, Buckingham county, Virginia; well timbered, has good drinking water, fine grass, and is a desirable location for health and comfort. Farms in Talbot county, Eastern Shore of Maryland, on the salt water, in healthy sections. Also, in Baltimore county, within 12 miles of the city.

Cotswold Rams, Ewes, Ram and Ewe Lambs from the best flocks in the United States. Also, Southdown Ram Lambs from fine flocks.

Shanghai Fowls from different importations, and as grown by Professor James M. Clintock, for which, I am the only Maryland agent.

Moor's Patent Premium Wheat Drills, on more accommodating terms, with the improvements.

Letters of inquiry and orders, post paid, will receive prompt attention.

MARTIN GOLDSBOROUGH,
Agent, Harrisonville, Baltimore Co., Maryland.
July—tf

AGENCY FOR THE PURCHASE AND SALE OF IMPROVED STOCK.

STOCK Cattle of all the different breeds, Sheep, Swine, Poultry, &c. will be purchased to order, and carefully shipped to any part of the United States, for which a reasonable commission will be charged. Apply to

AARON CLEMENT, *Philadelphia.*
Refer to Gen. W. H. Richardson, Richmond, Virginia.

N. B.—All letters, post-paid, will be promptly attended to. *ap—tf*

SAUSAGE, OR PIE MEAT CUTTERS.

LUDLAM'S celebrated pattern, improved by the undersigned.

This Sausage Cutter received a Gold Medal at the Maryland State Fair of 1853, also, at the Mechanic's Institute, as being the very best article on exhibition. It possesses a number of advantages which are not to be found in any other machine, viz: the knives can be taken out and cleaned. The whole article is of iron, very compact and durable, and warranted to cut four times the amount of any other machine in the market, and 33½ per cent. cheaper. Price \$5 50. A liberal deduction to the trade. None genuine as the premium and improved article without our label.

Also, our improved Sausage Filler or Stuffer. All of the above articles can be forwarded by express at a very small expense.

F. B. DIDIER & BRO.
No. 97, N. Paca, near Franklin St., Baltimore.
oct—2t.

CHESTER PIGS.

THREE Pair Genuine Chester Pigs, four months old, raised from the stock of Mr. Dobbin of Maryland, for sale by

THOMAS BRANCH,
Oct. 1, 1853—2t Petersburg.

A MOST DESIRABLE FARM FOR SALE.

253 ACRES of land, 16 miles from Richmond, 70 acres being "James river low grounds" and the residue the best quality of up-land on a clay bottom, separated from the 70 acres by the "James River and Kanawha Canal," which passes through the farm, and over which there is a bridge, to be supported in perpetuity at the expense of the Canal Company. The buildings on the farm are comfortable and beautifully located, commanding the most picturesque view of James river. This farm offers peculiar advantages from the facility of communication with Richmond—one of the best markets in the country—the proverbial fertility of "James river lands," and the fact that such a farm is rarely offered for sale. It will be sold unusually low, if application be made soon, and on accommodating terms, with the growing crop of corn, about 5 acres of Irish potatoes, cattle, horses, mules and farming implements, including a new "Hussey's Reaper," &c. &c. &c.

Apply, pre-paid, to

GODDIN & APPERSON,
Richmond, Va.

Or to **P. D. BERNARD,**
Publisher Southern Planter.

Baltimore Sun, Philadelphia Ledger and National Intelligencer insert three times each and send accounts to this office for settlement.

October 1, 1853—3t

STEPHEN H. FISHER, MANUFACTURER OF BOOTS AND SHOES, No. 228, Broad Street, north side, between 3d and 4th streets, Richmond, Virginia, keeps constantly on hand a full assortment of ready made Boots and Shoes of his own MANUFACTURE, for Ladies' and Children's wear, which he will sell as low as can be purchased in this city.

Boots and Shoes for Gentlemen and Boys on hand, or made to order at short notice.

Servants' Shoes of all qualities constantly on hand.

☞ All work warranted. ☞

☞ Farmers are invited to give him a call. ☞
oc—ly

AGRICULTURAL WAREHOUSE.

THE subscriber continues to manufacture Agricultural Machines, viz. Horse Powers, Threshers, Fan Mills, Hunt's Patent Wheat Drill, Hay Rakes, Hay Presses, Straw Cutters, Corn Shellers, Hillside and Subsoil Ploughs, Corn and Cob Crushers, Cultivators, Harrows, &c., all of which will be made in the best manner and of the most approved patterns. My Horse Power and Thresher with self-oiling box have been tested three seasons, and uniformly pronounced the best in use. Machines repaired, Castings in iron and brass furnished at short notice.

H. BALDWIN,
oc—2t 148 Main street, Richmond.

A. MORRIS, 97 Main Street, is constantly supplied with all NEW and STANDARD AGRICULTURAL WORKS. The subscriber respectfully invites the attention of the public, especially those visiting the Agricultural Fair, to his extensive assortment of Books on Agriculture, among which may be found

The Chemical Field Lectures for Agriculturists, by Dr. J. A. Stockhardt; translated from the German: edited with notes by James E. Tesehemäher.

The Field Book of Manures, or the American Muck Book, treating of the nature, properties, &c. of all the principal manures in common use, by D. J. Brown.

The American Farm Book, or Compend of American Agriculture, being a practical treatise on soils, manures, draining, &c. and every staple product of the United States, with the best methods of planting, cultivating and preparation for market, by R. L. Allen.

Elements of Agricultural Chemistry and Geology, by James F. W. Johnston, M. A.

The Monthly Journal of Agriculture, containing the best current productions in promotion of agricultural improvement, including the choicest prize essays issued in Europe and America, with original contributions from eminent farmers and statesmen, 3 vols. 8vo. John S. Skinner, Editor.

The Principles of Agriculture, by Albert D. Thaër.

The Farmer's and Planter's Encyclopædia of Rural Affairs, embracing all the most recent discoveries in agricultural chemistry, adapted to the comprehension of unscientific readers, by C. W. Johnson, Esq.

European Agriculture and Rural Economy, from personal observations, by Henry Colman.

Chemistry in its Application to Agriculture and Physiology, by Justus Liebig, M. D.

The Book of the Farm, detailing the labors of the farmer, ploughman, field worker, &c. by Henry Stephens.

Elements of Scientific Agriculture, or the Connection Between Science and the Art of Practical Farming, by John P. Norton, M. A.

An Essay on Calcareous Manures, by Ed. Ruffin: 5th edition, amended and enlarged.

The Farmer's Barn-Book, by Clater, Youatt, Skinner and Mills.

Together with many other valuable works on farming, the treatment and management of cattle, &c.

A. MORRIS,
Bookseller, Stationer and Dealer in
oc—3t Piatto Fortes, 97 Main Street.

SUPERIOR FOWLS.

I WILL offer for sale at the Virginia State Agricultural Fair a large number of the Cochins China, Shanghais, Bramah Pootra and other most desirable breeds of fowls.

LEWIS BAILEY.
Fairfax, Oct. 1, 1853—2t

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HALL & SPEER, PLOUGH MANUFACTURERS, No. 166 Penn Street, Pittsburgh, Patentees of the celebrated First Premium Iron Centre and Hillside Revolving Beam Ploughs, also manufacture Patent Lever, Centre Lever, Improved Peacock, Wrought Mouldboard, Creole, Valley, and every other description of Ploughs, Plough Castings, Cultivators, &c.

Morton & Booker, Agents, Richmond, Va.

Watkins & Morton, Agents, Petersburg, Va.

Agencies will be established in all the principal towns throughout Virginia, so that points can be supplied regularly and conveniently.
nov—6t H. & S.

SINTON & SONS' NURSERY, NEAR RICHMOND, VIRGINIA.

AS the season for planting has arrived, the subscribers would respectfully call the attention of their friends and the public generally, to their large and extensive collection of FRUIT TREES, embracing, perhaps, a selection that has not been surpassed, for the climate of Virginia, and nearly all propagated from fruit-bearing trees in their own orchard.

Catalogues, with directions for planting, may be had at William Palmer's Seed and Plough Store; at Peyton Johnston & Brother's Apothecary Store; at C. J. Sinton & Co.'s Hardware Store, and at Logan Waller's Commission House, where any orders left will be punctually attended to, and letters addressed to the subscribers, Richmond, will receive prompt attention.

nov—tf JOSEPH SINTON & SONS.

AGENCY.

I AM willing to assist gentlemen in purchasing and selling farms, stock, and poultry of every description; to attend to receiving and properly forwarding animals; also, to procure suitable overseers and laboring men for farmers and planters: all of which will be attended to for a small commission. My position as Marshal of the Maryland State Agricultural Society gives me advantages of knowing many men, and most good stock, which with my general knowledge of land induces me to extend the agency to land, men and stock. I have some fine farms to sell in Talbot county, and several in Baltimore county: subject to my order a number of prize animals, saddle and other stallions, and a few fine mares; Durhams, Devons, Alderney, and Ayrshire; pure long woolled sheep from the best flock in the United States; Chester and Suffolk pigs; Shanghai and other new and large fowls; also, two fine Jacks. All letters post paid, will receive prompt attention.

MARTIN GOLDSBOROUGH.

Harrisonville, Baltimore Co., Md.

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C. B. Calvert & C. Hill, Washington City; G. W. Hughes, West River, Md.; J. N. Goldsborough, Easton, Md.; R. McHenry, Emerton, Md.; S. G. Fisher, Philada., Pa.; C. P. Holcomb, Wilmington, Del.; Col. J. W. Ware, Berryville, Va.; I. G. Wright, Wilmington, N. Carolina; J. W. H. Brownfield, Charleston, S. C.; McGill Robinson, Louisville, Ky.; Wm. A. Lake, Vicksburg, Miss.; Dr. Henry M. Robinson, Huntsville, Ala.; T. Hayward and Maj. R. Hayward, Tallahassee, Florida.
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WILLIAM P. LADD.

APOTHECARY AND DRUGGIST,

No. 319, head of Broad Street, Shockoe Hill, Richmond, Virginia.

DEALER in English, Mediterranean, India and all Foreign and Domestic Drugs and Medicines; also, Paints, Oils, Varnish, Dye-Stuffs, Window Glass, Putty, &c. For sale on the most accommodating terms.

Orders from Country Merchants and Physicians thankfully received and promptly attended to
ja 1851—tf

SUFFOLK PIGS.

THE subscribers are prepared to receive orders for pure Suffolk Pigs, bred from stock imported in 1843 by the late William Stickney, also by the subscribers in January last. Address

JOSIAH STICKNEY,

Wgterton,

Or, ISAAC STICKNEY,

Boston, Mass.

Boston, August, 1853—6t.